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Lectures
ON THE
SURGERY OF CHILDHOOD.

DELIVERED AT THE HOSPITAL FOR SICK CHILDREN.

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LECTURE III.

SURGICAL DISEASES—*Hernia in Children; Statistics; General Remarks on Hernia in Children; Congenital Umbilical Hernia; Adventitious Umbilical Hernia of Infancy; Nipple-like Fleshy Tubercle of Umbilicus; Inguinal Hernia in the Male Child; Congenital Inguinal Hernia; Complications; Hernia Infantilis; Inguinal Hernia in the Female Child; Treatment of Inguinal Hernia; Frequency of Diseases of the Bones and Joints in Children; Inexpediency of hasty Excisions of Joints or Amputations in early life; Concluding Remarks.*

GENTLEMEN,—In the present lecture, we arrive at last at the surgical diseases, properly so called. The constitutional peculiarities of childhood impress their character upon these diseases, and modify their progress, their termination, and their treatment. Independent of these modifications, we find numerous affections which are either peculiar to early life, which are then most frequently met with, or, at any rate, which present at this time certain specialities deserving our attention.

Hernia. I hinted in the first lecture that these diseases might be connected with some congenital defect, might arise from injury, or might depend on less obvious causes, constitutional or local. I purpose occupying the greater part of your time to-day with the consideration of an affection belonging to the first of these divisions; viz., hernia, as it is met with in the child. I do so, because—though I may have little that is absolutely new to offer to you—I have found practically that somewhat vague, not to say erroneous, notions on the subject exist in the minds of certain practitioners, and perhaps, too, I may be able to collect and present to you at one view, with the brevity which a lecture enforces, various facts and observations, most of which exist, indeed, in such admirable works as those of Lawrence, Scarpa, and Cooper, but which are there dispersed and mixed up with the description of the disease as it occurs in the adult.

Hernia is an affection which is very frequently met with in children. According to Malgaigne, within the first year after birth, *one* male child in every *twenty* is ruptured; after the first year, however, the proportion steadily falls, till at the age of thirteen, it has become as low as *one* in *seventy-seven*; beyond this time of life, the ratio begins again to rise.* From Mr. Heather Bigg, through whose hands pass about two thousand cases of hernia annually, and to whom I am indebted for much valuable information, I learn that during the past year the proportion borne by his cases of rupture in children to those of adult life, was as *one* in *nine*—the numbers in early life being as follows:—

From 1 month to 3 years	126
From 3 years to 6 years	49
From 6 years to 10 years	34
From 10 years to adult life	15
	224

At this Hospital there have come under my notice 133 cases of hernia (all, of course, in children), 88 of which occurred in males, 45 in females. Though this number may not be very large, it is probably sufficiently so to enable us to institute some comparison with the records of cases at all ages preserved at the Truss Society.

Out of the 133, 66 were *umbilical;* 35 occurring in females, 34 in males: the ages at which they were brought to the Hospital varying from sixteen days to three years, but in the great majority being less than twelve months. As far as *umbilical* hernia is concerned, then, there was little or no difference in the two sexes, the numbers being almost identical. *At all ages*, in the Truss Society's report for twenty-eight years (Lawrence, *On Hernia*), for 2775 cases of umbilical hernia in the female, there were only 664 in the male, or in the proportion of about 100 to 24. In children, then, it would seem that the great preponderance of this form of rupture in the female sex, which is met with in after life, does not obtain.

Of *inguinal hernia*, I have had 64 cases, 54 in the male and 10 in the female. This form of hernia is much more common in male than in female children, as 100 to about 18.5. It would appear, however, to be by no means infrequent in girls, being in fact proportionately more common in them than in the grown woman, for *at all ages* the proportion is as 100 to 2.2.

Dr. Küttner, in an article on the influence of sex upon the diseases of children, founded on observations at the Children's Hospital at Dresden, states that the disposition to ruptures appears to be greater in boys than in girls; as, out of 116 cases of navel and inguinal herniæ, 75 were in males and 41 in females. These numbers agree very closely with those noticed at this Hospital; for, as Dr. Küttner does not distinguish between the two forms of hernia, the greater frequency of *inguinal* rupture in the male inclines the balance strongly in that direction.

I have given these statistics, which must, of course, be taken for what they are worth; because, from certain remarks a few months since in a medical journal, it appeared to be the opinion of one of our best informed and most intelligent surgeons that inguinal hernia was not merely very rare in women, *but especially so in young ones;* and though, on the authority of Mr. Kingdon, this statement was afterwards modified, it was added that inguinal herniæ in young females "never become strangulated." It so happens, however, that a case of strangulated inguinal hernia in a young female came under my care at this Hospital in 1856.

A girl, of the name of Jeannette Mairie, eleven years of age, was admitted on July 2nd, with strangulated inguinal hernia of the right side. She had been wearing a badly fitting truss, but the bowel had come down on the previous day, and could not be returned. The hernia, when I saw it, was of small size, very tense and tender, and accompanied with the usual symptoms of strangulation. I succeeded at last, though with considerable difficulty, in returning the bowel, and no operation was required.

It will be noticed that I have said nothing of *femoral hernia;* in fact, it is this form of rupture which is really most uncommon in children, whether of the male or female sex. My friend Mr. G. D. Pollock, whose connection with the Truss Society has given him an extensive field of observation in this affection, corroborates this assertion; Mr. Heather Bigg informs me that not one case of femoral hernia in a child has come under his notice; I have never seen a case of it at this Hospital; Lawrence, in his admirable work on *Hernia*, mentions only one case below the age of 12 (our limit at Great Ormond Street); this one having been noticed by Sir Astley

* The following table is taken from Malgaigne's *Recherches sur la fréquence des Hernies*, etc.:—

From birth to one year, the proportion of cases of hernia in male subjects is as	1 to 20.67
From 1 to 2 years	1 to 29.09
„ 2 to 3 „	1 to 36.87
„ 3 to 4 „	1 to 55.64
„ 4 to 5 „	1 to 59.72
„ 5 to 13 „	1 to 77.31
„ 13 to 20 „	1 to 41.72
„ 20 to 28 „	1 to 30.74
„ 28 to 30 „	1 to 20.23

Cooper. Still it does occur, and may even become strangulated, requiring the usual operation for its relief. A girl, 8 years of age, was brought to St. George's Hospital in April 1854, with a strangulated femoral hernia of the right side, of recent origin, for which she had never worn a truss. She was operated on by Mr. Johnson, when a very small knuckle of intestine, coated with lymph, as well as a small portion of omentum, were found in the sac. The case did well.

Before speaking of the particular forms of rupture, I may offer a few remarks applicable to hernia generally as it is met with in the child.

1. With regard to the contents of the sac. These are generally *intestinal*, for the omentum in infancy is short and imperfectly developed, seldom reaching much below the navel. The large intestine too, especially the sigmoid flexure, at this time of life, is comparatively moveable, and hence there would be, perhaps, a greater chance of finding this present when the sac is opened.

2. It is in early life especially that a radical cure of hernia may be hoped for and confidently expected, if methodical pressure is steadily maintained for a certain period. In umbilical and congenital inguinal herniæ there is a strong natural tendency of the openings to contract; and if we only prevent the protrusion of the bowel, we may calculate, almost with certainty, on obliteration taking place, on the abnormal channel becoming blocked up. Even in the non-congenital form of inguinal hernia a permanent cure will, in all probability, be effected, for in very early life the development of the pelvis is rapidly inducing changes in the inguinal canal which becomes more and more oblique; the intestines and other abdominal organs are enlarging, and consequently less prone to protrude, and the dilated opening tends to contract, if no unnatural distension of it be permitted, in obedience to the general law by which hollow parts adapt themselves to their contents.

3. In our treatment, we must bear in mind not merely that early attention implies permanent cure, but also that ruptures in infants, if allowed to remain unreduced, are by no means unattended with danger. Incarceration and strangulation may take place at any age; and though they may be relieved without the use of the knife with comparative frequency in early life, yet, if reduction cannot be effected, the subsequent ill-consequences advance with much rapidity, and no time should be lost in having recourse to operation. Mr. Fergusson has been called on to operate on an infant seventeen days old; and Mr. Erichsen in two, under the age of six weeks. At St. George's Hospital, within the last seven years, there have been, in addition to the case of femoral hernia already alluded to, four of inguinal hernia, requiring operation, in children varying in age from eleven weeks to fourteen months; of these, one was *oblique*, the other three *congenital*.

4. The truss to be worn need not, of course, be of anything like the strength required in the adult, but it may be employed, with certain modifications to be alluded to hereafter, with perfect safety in the youngest child, and the sooner its use is commenced, the less the danger of the patient, the greater the chance of his permanent relief. Considerable care, however, is required in the management of the truss; for, in consequence of the rapid alterations taking place in the size of the patient, the truss which at first fits well may soon prove useless, and the cure be making no progress, the patient's life really endangered. I have said nothing of the operation for the radical cure of hernia in children, because, without denying that it may in some cases be called for, I cannot but think that we are seldom justified in having recourse to an operation, by no means absolutely unattended with danger, to effect that which can usually be accomplished without the slightest risk, In the adult, of course, the conditions are different, the chance of cure by compression alone being in their case comparatively small. I may mention that a child has been brought to me on whom the operation had been performed and *failed*, the hernia having been reproduced.

These remarks may seem, perhaps, unnecessary and trifling; but very often, among the out-patients at this Hospital, when an infant has been brought to me with a rupture, I have learnt from the mother, that she has been told by medical men and even at public institutions, that "the child was too young to wear anything; that she must wait till the infant was much older."

Umbilical Hernia. This is the form most characteristic of early life, becoming comparatively rare as we advance in years, especially in the male sex. Umbilical hernia may be strictly congenital, or may come on soon after birth; both these forms presenting certain differences from that which is met with in the adult.

Congenital Umbilical Hernia. At an early period of intra-uterine life, the greater part of the intestine is placed inside the root of the umbilical cord, the anterior abdominal muscles being widely separated from one another, especially in the region of the navel. As development advances, the bowel enters the abdominal cavity, and an aponeurotic ring surrounds the base of the cord, which at birth should only contain the urachus and the umbilical vessels. Occasionally, however, it happens that the base of the cord remains of considerable size, and continues to lodge some portion of the intestine; we then find a rounded or conical pouch, the top of which corresponds to the umbilical cord, its base to the aponeurotic abdominal ring, which is preternaturally dilated, whilst its sides are composed of skin, of cellular tissue more or less condensed, and of the peritoneum. The size of this pouch may vary very considerably; sometimes it includes the large intestine, the stomach, and even the liver and spleen. More frequently, fortunately, it is of small size, and lodges only a portion of intestine. It has been a question in this, and indeed in the other forms of umbilical hernia, whether any covering of peritoneum is present, whether in fact a sac exists. Unquestionably it does, the error of those who maintained a contrary opinion having probably arisen from an idea that the vessels of the cord perforate the serous membrane as they enter the abdomen, instead of having a reduplication of it thrown around them. Still, from the thinness of the coverings and the close connection between the peritoneum and the integument at the seat of the cicatrix, it is difficult at this point to trace the distinction between the two, and much caution is necessary if we are called on to operate.

Treatment. If the protrusion is extensive and embraces other viscera besides the intestine, the chance of the child surviving becomes very small, especially as this condition is often combined with other malformations prejudicial to life; though cases are on record in which a spontaneous cure has occurred even when a portion of the liver has been prolapsed. If, on the other hand, the case is uncomplicated, if the tumour is small, and includes only a moderate amount of intestine, the chances are more favourable. In dividing the cord, care must be taken not to include any portion of the protruded bowel in the ligature; for, if very small, its presence may be overlooked, and the intestine may be, and has been, fatally injured. The hernia having been carefully returned, pressure may be applied by means of suitable compresses, and the parts kept in position by bandages or plaisters. Under this treatment, the stump of the cord may be expected to separate in about a week after birth without the bad consequences which would result if the intestine were still prolapsed.

Adventitious Umbilical Hernia of Infants. Even if no hernia exist at the time of birth, it may make its appearance soon afterwards; for the aponeurotic opening through which the umbilical vessels pass is not at once obliterated on the formation of the cicatrix: its contraction and the consolidation of the parts around proceeding gradually, and requiring a certain time before they gain the power of resistance which is met with ultimately. During this period, the intestines, becoming distended by the food they receive, and compressed by the action of the abdominal muscles, may be protruded through the umbilical opening, which offers less resistance to their impulse than any other portion of the linea alba. Hence it is, that this form of hernia occurs most frequently within the first year of life. In the adult, on the other hand, the navel is so firm and solid that the hernia, unless it has continued from infancy, is more likely to take place above or below the proper umbilical opening, but more frequently above, in consequence of the greater breadth of the linea alba in this situation. Even in children, however, the rupture is not invariably situated at the umbilicus itself; in a child of the name of Eva Beckford, aged three, who was under my care, the hernia occurred distinctly above the navel.

The contents of the sac consist usually of intestines; in a case, however, related by Cabrolius, where the child, a female, had been born with obstruction of the urethra, a navel rupture had formed consisting of the bladder, which soon gave way externally, so as to form an urinary fistula in this situation. The child grew up, and, at the age of eighteen, the urethra was opened by operation, the urine resumed its natural course, the umbilical tumour subsided, and the fistula closed.

With respect to the treatment, it may be remarked that owing to the natural disposition of the ring to contract, a cure may take place independently of any interference on the part of

the surgeon. It would not, however, be safe to trust entirely to nature; for, if the ring is kept habitually distended, its contractile tendency will gradually be lost, and the opening remain permanently patent. To ensure a cure we must at once return the protruded bowel, and keep it reduced. For this purpose the ligature was at one time employed; but, though Desault warmly supported this operation, its consequence in the hands of others was so injurious, that its use is now generally abandoned, compression offering a safer and equally efficacious means of relief. In very young infants, and when the rupture is slight, covering the part freely with pure collodion may occasionally prove effectual. As this, however, cannot often be depended upon, we must usually employ more decided pressure which may be applied by means of a piece of cork or some similar substance, secured by the aid of plaisters; or, better still, by a shield of gutta percha with a nipple-shaped projection in the centre, like these, which were constructed by Mr. Braine, our most intelligent house-surgeon. A very efficient, and at the same time inexpensive instrument also, is the one I show you, consisting of a pad inserted in a broad band of elastic material, which is made to lace behind so as to adapt it exactly to the individual case; this can be managed with sufficient ease by a mother of ordinary intelligence, to ensure a ready cure. Should strangulation occur, and an operation be required (which, however, is most improbable), it might perhaps be as well to try and relieve the stricture without opening the sac, as the chances of recovery in the adult appear to be increased by this procedure.

Nipple-like Fleshy Tubercle of the Umbilicus. I venture to introduce here a few words respecting a troublesome affection of the umbilicus, which might possibly be mistaken for hernia, and of which I have seen several cases, though the only notices of it I have met with are by Lawrence, who shortly alludes to it, and by Sir Astley Cooper, who devotes a few lines to it under the name of fleshy tumour of the navel. In these cases we find, rising from the centre of the main umbilical depression, a stout, nipple-shaped papilla, or tubercle, of uniform thickness, which may be nearly an inch in height, and about as much in circumference. It is firm in substance, of a florid red colour, moist on the surface, and discharging a mucous secretion, the reddened surface becoming continuous at its base, by an abrupt and well-defined line, with the ordinary skin. Occasionally, there is an aperture at its summit, through which I have passed a fine probe, for the distance of two or three inches; in no instance, however, have I found it lead to the bladder, nor have I seen any urine passed through it. In other cases, the tubercle has been quite solid, without any central opening. There is usually no pain in the part, except when it is handled. The constant secretion, however, as well as the bleeding, which readily occurs on any friction by the clothes, render it a source of considerable inconvenience. The condition is said to be congenital, or at least noticed from the time of separation of the cord. I have seen it at 2, 3, 5, and even as late as 7 years of age, in children of whom all previous treatment by various practitioners had been unsuccessful.

The application of nitrate of silver (solid or in solution), of sulphate of copper, etc., I have always found to fail in curing it. In some cases, however, I have succeeded, by means of the acid nitrate of mercury repeated several times; but the most certain way is, to include its base in a ligature, when the dead part separates in a few days, leaving a healthy surface behind it, which soon cicatrises. I have had no opportunity of examining the exact nature of this tubercle: it does *not*, however, belong to the class of nævoid or erectile tumours, though the moistened surface bleeds readily, as I have already mentioned. Sir Astley Cooper states that, in a case of this kind brought to him from the country, at the age of seven, he "found it arose from the circumstance of the funis being so long as to project beyond the skin of the navel, which prevented its cicatrisation".

Inguinal Hernia in the male child may be *oblique*, rarely, if ever, *direct*. That common oblique hernia really occurs in very early life is demonstrated occasionally during operations. In 1852, Mr. Cæsar Hawkins found this form of rupture in an infant eleven weeks old, on whom he operated at St. George's Hospital; and Mr. Lawrence notices the same fact. In the great majority of cases, however, the hernia is "*congenital*", though in truth this term is not strictly correct, as the rupture may not actually occur till a very considerable period after birth. In this case the protruded parts descend along the canal of communication between the peritoneum and the tunica vaginalis, which has not become obliterated, the bowel coming into direct relation with the testicle, which appears, as it were, contained within the sac. The testicles, it is well known, are originally formed in the abdomen, where they are situated immediately below the kidneys, and it is not till about the fifth or sixth month of fœtal life that they begin to shift their position, traversing the inguinal canal during the eighth month, and towards the end of the ninth reaching the bottom of the scrotum, where they are usually found at the period of birth. The natural alteration in the position of the testicles requires corresponding changes in its serous covering—the tunica vaginalis. This membrane, which originally formed part of the peritoneum, still communicates with it for a short time after the gland has reached the scrotum; soon, however, the communication becomes cut off, and at birth the upper end of the canal is *frequently*, but by no means *invariably*, closed. According to the observations of Professor Engle, the canal is closed at birth in ten per cent.; but more constantly, or at any rate more completely, on the left side than on the right. In this way, perhaps, the greater frequency of inguinal hernia on the right side may, to some extent, be accounted for, since it may be noticed that in infants, as well as in adults, inguinal hernia is much more frequently met with on the right side than on the left, and it is evident that the cause for this difference usually assigned—namely, "the employment of the right side in those offices of life which require the most powerful exertion"—will hardly apply in the case of infants. At the end of a fortnight, no trace of the canal was to be found on the left side in 30 per cent., whilst in 60 per cent. it remained open on both sides. In the adult, the vaginal canal, or some remains of it, was discovered in 31 per cent. of the bodies examined. The tunica vaginalis, then, may continue, even for years, to retain its connexion with the peritoneum, as it does permanently in quadrupeds, with the exception of the chimpanzee, the only one of the brute race, according to Owen, which resembles man in having the vaginal tunic closed. If this communication is of small size, it may allow only of the passage of fluid to or from the peritoneum, giving rise to what is called *congenital hydrocele;* but if of larger dimensions, some of the abdominal viscera may possibly descend through it, constituting *congenital hernia.*

We must bear in mind, also, that it not infrequently happens that the descent of the testicle may be arrested or incompletely performed, and the gland may remain in the inguinal canal, or even entirely within the abdomen. Should we find, therefore, a swelling in the groin, we should ascertain the position of the testis before we hastily pronounce the case to be one of hernia, lest we subject this gland to the pressure of a truss, as I have seen in more than one instance, neither to the advantage nor to the comfort of the patient. At the same time, we must remember that the imperfect descent of the testis may depend upon the presence of adhesions to the bowel, and the case be complicated, by the coexistence of hernia, adding considerably to the difficulties of our treatment. Moreover, a scrotal hernia may undoubtedly take place whilst the testicle is still retained in the abdomen. Mr. Heather Bigg informs me that he has lately attended a family where two of the sons have had, and been cured of, inguinal hernia of the right side, the testicle never having descended; the father in this case has only one testicle in the scrotum, but has never suffered from rupture.

Occasionally it happens that *encysted hydrocele of the cord* is mistaken for hernia, for if the cyst is placed at the abdominal ring, or even inside the inguinal canal, the diagnosis from hernia becomes often really difficult. The most characteristic point of difference would probably be, the comparatively fixed position of the hydrocele, which can neither be brought completely down into the scrotnm, nor yet be forced entirely within the abdomen, as would happen with a reducible hernia. Mr. Curling, in his valuable work *On the Testis*, relates an interesting case where an acute hydrocele of the cord was mistaken for strangulated hernia, and an operation at one time contemplated. On the other hand, it is possible that an irreducible hernia may resemble and be taken for an encysted hydrocele, as in the case of a boy related by Sir Astley Cooper.

Hernia Infantilis. There is a variety of inguinal hernia which I ought to mention, as it has received the special name of infantile hernia. This, however, is by no means peculiar to infants, and not often met with at this, nor indeed at any age, though Hey, by whom it was first recognised and described, having noticed it in the body of a child who died of this affection at the age of fifteen months, gave to it the name it now bears. The infantile differs from congenital hernia in the fact, that the serous canal of communication has been closed to a certain extent, and there is a distinct and separate hernial

sac, formed of peritoneum, protruded, in its descent, from behind into the tunica vaginalis, which as it were overlaps it. On opening the vaginal tunic, therefore, we do not come at once upon the bowel, but find it still invested with a distinct pouch of peritoneum, pushing the posterior wall of the tunic before it. In this way, we may have to divide *three* layers of serous membrane before we get into the interior of the sac, before we actually arrive at the protruded viscus.

Inguinal Hernia in the female child is, probably, in most cases of the ordinary oblique form. A projection, however, of peritoneum into the inguinal canal, according to Professor Meyer, takes place in the female as well as in the male fœtus; and, though less considerable and undergoing its changes much earlier—as soon, perhaps, as the fifth month of intra-uterine life—such a diverticulum may still be found occasionally at birth passing through the abdominal ring in connexion with the round ligament. Wrisberg discovered in 10 out of 900 female bodies such a serous canal, existing usually on both sides, occasionally only on one. It is possible, therefore, that a hernia in female children may, in some cases, descend through these diverticula, and may constitute a kind of congenital hernia. Diagnostic marks, however, by which we may be enabled to recognise it, are absent, and we cannot be confident that the existence of such diverticula would materially favour the production of a rupture.

In inguinal hernia, in the female, it may be well to remember that the ovary may descend through the canal, and form the hernial protrusion. In a case related by Billard, occurring in a female infant, a rounded tumour was noticed in the left groin, which was found, after death, to consist of the left ovary, which had passed through the canal and abdominal ring, both of which were decidedly enlarged. The ovary and extremity of the Fallopian tube were lying free at the bottom of the hernial sac, which was formed of a prolongation of the peritoneum, with the cavity of which it freely communicated.

Treatment. In inguinal hernia in the male, as well as in the female, we must bear in mind that a large proportion of the cases, in very early life, is capable of being cured, and consequently it is to this end that our treatment should be directed, with every hope of a permanently successful result. For this purpose, compression should be commenced as early as possible, and maintained constantly by night as well as by day. Under ordinary circumstances, the kind of truss to be adopted may be that for the opportunity of showing you which I am indebted to the kindness of Mr. Heather Bigg. Its principle is that of a slight metallic spring, softly padded, encircling the pelvis about an inch and a half below the crest of the ilium, and terminating at one extremity in a pad of a fungiform or pear shape, the upper portion of which rests against the hernial orifice, whilst the lower passes under the perineum, and is attached to a small hook on the opposite side. The advantage of this special form of truss for hernia in infancy is, as Mr. Bigg remarks, "that the pad not only entirely closes the inguinal canal, but produces a slight uplifting of the perineum, which more than anything tends to prevent the hernia escaping from the inferior margin of the inguinal ring". When the child is a little older, say upwards of three years of age, the fungiform extremity may be dispensed with, and the under-strap fastened to the same side as that on which the hernia exists.

In using these trusses, which may be covered by oiled silk, to prevent their being spoiled by moisture, we must not forget the fact that the pelvis in children is undergoing rapid changes; we must examine the case, therefore, carefully from time to time, and change the truss as soon as it no longer serves its purpose. We must endeavour, also, as far as possible, to enlist the intelligent aid of the mother or the nurse, to impress upon them the necessity of constant care and watchfulness on their part in maintaining effectual compression. The period required for a *cure* cannot, of course, be accurately laid down before hand. The younger the infant, and the more effectually the hernia is prevented from protruding, the sooner will obliteration of the opening occur; it is probable, too, that a cure will take place the more readily if the hernia is congenital rather than oblique. In some cases, occurring almost immediately after birth, when there has been a difficulty in procuring or in wearing a truss, I have employed a pad of wax, moulded when warm to the shape of the parts, or an air-pad, as suggested by Mr. Erichsen, and secured by means of a flannel or partially elastic bandage, kept in its place by a perineal strap of wash-leather. Or, when the rupture is slight, we may employ an elastic belt, lacing behind and fitted with a fungiform pad as well as with a perineal band, like the one I show you, which was made by Mr. Heather Bigg, at my suggestion. If, in such cases, this or some similar plan is adopted at once, and maintained, so as entirely to prevent the descent of the hernia, even for a week or two, there is a considerable chance of the tunica vaginalis becoming separated from the peritoneum; if not, the sooner the use of the steel truss is commenced the better.

Where the hernia is complicated with partial or complete retention of the testicle, its management often becomes more difficult, and may require special modifications, adapted to the individual case. Sometimes, if the testicle has sufficiently cleared the external ring, a truss may be so adapted as to prevent the rupture from descending without pressing on the testis, or without allowing it to re-enter the inguinal canal. If, however, this cannot be managed, if the intestine is closely adherent to the testicle, and the two cannot be separated, it is advisable to endeavour to return *both* into the abdomen, and retain them there by means of a truss. In those cases where a rupture has occurred without the testicles having shown themselves at all, it is better also, I believe, at once to apply a truss, and disregard the consequent retention of the testis. It is true that it is desirable, if practicable, that the testicles should be placed in the scrotum rather than in the abdomen. The moral effect of the absence of these glands is considerable, and their development is probably favoured by their existence in their normal position; but, if much delay has occurred, the transition of these organs is seldom perfectly accomplished, adhesion to the intestine is frequently met with, and the persistence of the gland in the groin, complicated as we suppose it to be with rupture, is attended with greater inconvenience, and even with greater danger to life, than its complete retention in the abdominal cavity.

There is no time left for me even to enumerate the other surgical diseases which come under our care at this Hospital; I can only say that they are numerous, complicated, and important. In the eye, for instance, besides congenital cataract, we have the ophthalmia neonatorum and strumous ophthalmia peculiar to early life; and that the affections of the genito-urinary organs (to which I hope at no distant period specially to call your attention) contribute in no mean proportion to our operative surgery, this collection of calculi, removed by me at this Hospital, will serve, I think, to demonstrate. Our great surgical *cheval de bataille* is, however, no doubt the diseases of the bones and of the joints. The spine, the hip, the knee, the ankle, with, occasionally, the articulations of the upper extremities, are the parts the affections of which principally fill our surgical beds; for there the white-swellings of our older writers abound, there caries may be said to revel.

Diseases of Bones and Joints; Inexpediency of Hasty Operations in Children. It is true that these diseases may appear tedious in their progress, that the succession of patients is not rapid, and that the beds are occupied for a long time by the same individuals; it does not follow, however, that the diseases are devoid of interest, that much may not be learnt from their study, or that relief from suffering, rescue from deformity or mutilation, and even preservation of life, may not be accomplished by their steady investigation. It is in children especially that a cure may be hoped for, even in most aggravated forms of disease of these parts; for in children the plastic powers of nature are so great that recovery may take place when in the adult any such hope can scarcely exist. I have no hesitation in owning that, when I first became surgeon to this Hospital (not so many years since), I was less unwilling to have recourse to operations than I am now. In recent times, what is called conservative surgery has made much progress, and a joint is now excised, where, formerly, the extremity would have been sacrificed. This is, no doubt, a great improvement, but after all, the most really conservative surgery is, *to save the joint as well;* and this, I feel perfectly certain can, in early life, with care, time, and perseverance on the part of the surgeon, be accomplished much more frequently than is generally supposed. I need scarcely dwell on the advantages of this preservation, if it be practicable; to say nothing of our avoiding the risk of an operation, which is always appreciable, and in the knee is considerable even in children, the length and proportions of the limbs are preserved, and a considerable amount of motion in the joint may ultimately, in almost all cases, be obtained.

In the adjoining room you may see a few examples in illustration of this restorative power on the part of nature. In one child, Alfred Thistleton, in whom the destruction of the parts about the joint was so extensive, the fever so severe, and the

health so much impaired, that at one time I was on the very point of proposing excision, you will see that the child is now stout and well, that the limb is a very useful one, and the knee is only partially stiff. The relations have brought these children here to-day for inspection; for it is now many months since some of them were discharged from the Hospital, and, consequently, the lapse of time enables you to see that the cure is a permanent one. It is, in fact, I may mention by way of parenthesis, one advantage that we enjoy here, that we are usually able to keep sight of the case long after it leaves our wards, that we are able to watch the changes which subsequently occur, and, in cases of operations especially, to judge of their ultimate results; a great advantage, and one but too frequently overlooked or found impossible in hospital patients generally.

Whilst writing this lecture, I was glad to find my views on this subject corroborated and confirmed by a most eminent surgeon in Dublin, and one whose opinion might have been expected to incline differently, for he has been the great and successful advocate of excision; I mean Mr. Butcher. In his recently published *Third Report on Operative Surgery*, Mr. Butcher states, that it is "impressed strongly on his mind, nay, that it is his sincere conviction, that these severe operative measures will very seldom indeed be either warranted or called for" in children. That "repair in the young is to be looked forward to, to be depended upon as a certainty", and consequently that there should be "no hasty removal of diseased joints" in childhood.

Among the poorer classes, it is true, we have many disadvantages to contend with. Time, good air, and good living, are three great requisites in aid of our surgical treatment, but the demand for our beds is so urgent, that the first can seldom be afforded within the Hospital; and, as an out-patient, the child will seldom enjoy the two last, whilst it is deprived also, too often, of systematic care and of judicious nursing. Such impediments to success, as we cannot pretend to ignore them, must be fairly encountered and grappled with; difficulties exist in all cases, and in every sphere of action; it is the part of him who hopes to succeed in life, or who strives to conscientiously perform his duties, to be prepared for difficulties, to exert himself to his utmost to overcome them.

In bringing to a conclusion the first course of lectures ever delivered at this Institution, I may briefly state that they were undertaken because my colleagues, as well as myself, were most anxious to render generally available any information which this Hospital may afford; because we felt that our position here involved a trust, and that our offices had been bestowed upon us, not for our own individual advantage, but with the hope that we might contribute something to the knowledge of the diseases of children, and of their treatment.

Influence of Sex in the Diseases of Children. According to Dr. R. Küttner of Dresden, long before the complete development of the sexual organs, even in the earliest infancy, diseases depend much on sexual difference. From a comparative examination of ten thousand cases of infantile diseases, he says that:—1. Boys, particularly in the first year, suffer more from inappropriate food and diseases of the digestive organs than girls of the same age, and a greater number of boys will perish in consequence of such diseases; the relative mortality being about the same in either sex. 2. Diseases of the brain and the nervous system in general, are twice as frequent in males as in females, particularly in and after the fifth year of life. 3. Umbilical and inguinal herniæ are more frequent in males than in females. 4. Diseases of the respiratory organs are more frequent in females after the third, and even more so after the fifth year. A larger number of such diseases prove fatal in females. 5. The same observation is made in organic diseases of the heart. 6. Acute diseases of the blood exhibit no perceptible difference as to sex, but chronic anæmia and scurvy-like decomposition of the blood is more frequent in females than in males, especially after the eighth year. At this age, the proportion of thus diseased females to males is ten to one. Scrofula and tubercles show no particular difference in the first years; but, after the fifth year of life, tubercles in the lungs are found more frequently in females. The number of cases of rachitis is pretty equal in the two sexes, but it is often developed at a later period, and is apt to last longer in females than in males. 7. Chronic diseases of the skin, particularly eruptions of the scalp, are more frequent in females than in males, after the ninth year. 8. The same is found to be the case in tumours of the thymus gland. (*Jour. für Kinderkrankheiten, and New York Journ. of Med.*)

Vacation Lectures

ON

FIBRINOUS DEPOSITION IN THE HEART:

ITS HISTORY AND PRACTICAL MEANING.

DELIVERED AT THE GROSVENOR PLACE SCHOOL OF MEDICINE.

By BENJAMIN W. RICHARDSON, M.A., M.D., M.R.C.P.,
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Lecture I.

Introductory Remarks; *Plan of the Course; Different conditions of Blood in the Heart after death.* Fibrinous Concretions in the Heart: *their Forms; Structure; Weight; Chemistry; Process of Deposit; Post Mortem and Ante Mortem Deposits.*

[*Concluded from p. 47.*]

IV.—Deposition before and after Death.

Whether the separation of fibrine from the rest of the blood in the heart, as it is found in many instances after death, is an act *post mortem* or *ante mortem*, is a question, which for more than a century and a half has caused more disputation than almost any other in pathological science.

Harvey seems to have been acquainted with "polypi" (for so the old men characterised fibrinous concretions) in the heart; and Malpighi knew that the white clots found in the heart after death in inflammatory diseases, were the same as that crust which forms on the surface of inflammatory blood. Kerckringius, a writer of no mean repute, opposed the view, that the "polypi" were formed before death. His hypothesis was ably met in 1684, by a countryman of our own, Dr. William Gould, who, in the *Philosophical Transactions* for that year, described fibrinous deposit with remarkable accuracy. He not only denoted the symptoms which attend the progress of deposition, but pointed out the diseases in which deposition is most imminent; and even the further fact, that there may be deposited a form of concretion from which portions of fibrine may be borne away, and, being carried into the extreme parts of the circulation, may plug up the finer vessels, and stop the nutrition of the part beyond. Morgagni was well conversant with concretions of the heart. He also knew their source. The principal and peculiar substance of which they were made, he taught to be the same as that which forms the crust of blood in inflammation These concretions, he adds, are sometimes begun and even completed in the living body. He thought they might commence in cases of protracted syncope. We are now pretty well assured, all the world over, that there is such a thing as deposition of fibrine from the blood in the living body. It is also admitted by those even who see most clearly the full importance of this admission, that there is such a thing as separation of fibrine from the blood after death in certain cases. Let us consider both these positions with candid care.

Firstly, then, we may learn whether a concretion has been formed before or after death by examining the concretion, and by observing its relations to the surrounding blood.

There is one true and unmistakable form of *post mortem* concretion; that, namely, which I have marked first in my list of illustrations. I mean that separation in which the fibrine lies in a thin layer on an under stratum of red coagulated blood. Everything here points to the fact that the fibrine left the blood while the source from which it came was in a state of rest. No other explanation of this form of concretion is possible.

But, in reference to every other description of concretion which I have given, the evidence is equally clear in support of the view that they, whenever found, are of *ante mortem* date. I do not at present discuss how long before death any one of them may have been produced—that will constitute a subject of inquiry further on; but I say for the moment, that they are produced before death, and that they can only be explained as resulting from blood in motion. Where, for instance, there is a separated clot filling the whole of a cavity, such as the right auricle, it is certain that the clot must have been formed antecedently to death; for the simple reason, that there is no blood left in the cavity from which it could have been pro-

duced after the final result. When the clot is grooved, we have again demonstrative proof that the concretion was of *ante mortem* date; because the groove, whether curved or spiral, is in the line of a blood-current, and is, in fact, made by the transit of blood, as the bed of a river is made by its current. If the concretion is a hollow cylinder, containing red blood in the tube, the evidence in favour of the origin of the concretion from blood in motion is equally conclusive; for, as the tubular concretion is never met with except when the deposit takes place in a cylinder, as the pulmonary artery or the aorta; as the tubular concretion is never grooved spirally; as the centre of the tube is filled with blood; as these tubular concretions (in every case, at all events, in which I have met with them) show evidence of having been broken away from a basic attachment; and lastly, as they entirely fill the vessel in which they are found,—there can be but one reading of their origin, which is, that they were laid down from their circumference layer by layer; that they formed, in fact, a false and increasing tubular lining to the inner part of the vessel; and that the red blood found in the centre is the last remaining portion left there at the moment of dissolution.

It is but fair, nevertheless, for me to state that a hypothesis has been projected, to the effect that the tubular concretion may be produced after death. Dr. Humphry of Cambridge, in a most able essay on the *Coagulation of the Blood in the Venous System during Life*, assumes that a tendency to separate coagulation of fibrine will produce its effects after death in much the same manner, and in the same position as during life; and that it will thus lead to the formation of fibrinous clots upon and near the valves, and in the interior of the vessels. In this manner, Dr. Humphry further assumes, a tubular lining of fibrine may be laid down in the pulmonary artery after death, and be moulded upon the sigmoid valves, while the remainder of the blood in the vessels is fluid. This remaining blood, subsequently coagulating, would form a soft dark cylindrical clot, inclosed in and continuous with the fibrinous tube.

I am sorry that I am obliged to dissent entirely from this conclusion of Dr. Humphry. I dissent because, from my observations of the coagulation of fibrine in the static condition, it never separates from blood in the manner suggested; it always separates in such way as to crown the blood from which it was produced. True, blood left in the pulmonary artery, blood very rich in fibrine, may yield after death a thin coat of fibrine; but such coat will express but half a cylinder, and will lie on the upper surface, like the buffy coat of inflammatory blood.

Further, the true *ante mortem* fibrinous tube, as I have described it, is not a mere film of fibrine inclosing a large cylinder of red coagulum. Such a separation I have myself never seen. The hollow cylinders I describe are made up almost entirely of fibrine in layers; the red blood, not more than the size of a quill in diameter, and quite incapable of yielding such a surrounding mass, running along the centre. The same observations apply to those forms of separation in which the fibrine lines the whole of a cavity, as the auricle, and incloses a loose red coagulum.

The firm adherence of a concretion to the walls of the heart is another proof of an origin before death. To produce such adhesions as we have seen already, even though the adhesion be only mechanical, motion is required. The pulsating heart must *churn* out the fibrine; and it is in this act that the firm interlacement takes place. Owing to this fact, we find that, in the separation of fibrine which takes place after death, there is no adhesion of the fibrinous layer to the cardiac surface; yet it is clear that, if separation were the result of mere contact, there would be in these, as in other cases, a firm adherence. If the connexion betwixt a concretion and the heart be organic, however slight the connexion may be, the evidence is of necessity all the stronger, not only of the existence of the concretion prior to, but of an existence *long* prior to, death. This argument is so entirely obvious, that it is unnecessary to push it further.

I have one further word to say on the distinction of fibrinous concretions formed before and after death; this relates to the structure of the deposit itself. If a concretion be laid down in one layer, it may have been formed before death, though it need not necessarily have been so formed. But if a concretion be laid down in distinct layers, such concretion bears its own evidence of having been constructed in layers, step by step, from the blood. Or, if a concretion found in a newly dead body (in a body twenty-four hours dead) be changed in its centre into a soft purulent looking mass, then the proof is carried with the concretion, that the concretion was formed in the living body, and at a period of at least twelve or sixteen hours before death; for it takes forty hours to produce the softened change in fibrine at a temperature of 98°. I am not sure, indeed, that the change would progress at all at the temperature of the dead body; but, this point waived, certain it is that it would not occur within forty hours after death.

Lastly, some indication of a concretion being formed before death is to be gleaned from the mode in which it is moulded to the parts surrounding it. I agree with Dr. Humphry, that a *post mortem* concretion may bear the impress of that part of the cardiac wall against which it is left in contact; for I have found, by some recent inquiries directed to this point, that if gelatine dissolved in warm water be run into the vena cava, so as to fill the right side of the heart and the pulmonary artery, and if the solution be left to gelatinise, and the heart be then opened—the concretion, for so I may call it, of gelatine will be found bearing a slight impression of all the parts of the heart against which it has lain. At the same time, when the impression made on the concretion is very distinct, indicating that contraction has been made upon the deposit, and when with this modeling there is adhesion, as was the case in the concretion delineated in Fig. 2, then the presence of the impression is corroborative evidence of a separation during life.

To sum up. The proof of a *post mortem* concretion is its position—*on the upper surface of a red coagulum*. The proofs of an *ante mortem* clot are—(*a*) The fact of its filling a cavity; (*b*) the facts of its being grooved externally by a blood-current, or bored by a current through its centre; (*c*) its being firmly adherent to the heart either by mechanical or organic tie; (*d*) its structure being laminated, or containing in its centre broken up fibrine; (*e*) the fact of its being deeply indented by surrounding structures.

Are there any other proofs wanting in support of the view that deposition of fibrine takes place during life? To some minds, such proofs may be required; and so I proceed to them.

In continuance, then, I remark that the *weight* of a concretion is in many cases proof direct of the *ante mortem* nature of the deposit. The position stands as follows. The amount of fibrine in healthy blood is—I take an extreme point, in order to make the argument fairest—3 parts per 1000. The right side of the heart of an adult man, including auricle and ventricle, is capable, I find, in the relaxed state after death, of holding from 1400 to 1500 grains of blood. To make it contain this quantity, however, it is necessary to tie the inferior cava, to fix a funnel tube into the superior cava, and a straight tube into the pulmonary artery. The organ must then be held with the base upwards, and must be filled through the funnel tube until fluid appears in the tube in the pulmonary artery. The right side of the organ will thus be charged with fluid, and that to an extent rarely if ever met with as a *post mortem* result. The amount of fluid required for this state of fulness will be, as I say, 1400 to 1500 grains; let us accept 1500 grains as the amount. Granting that the heart were left at death thus charged with blood containing the natural amount of fibrine, the fibrine, however it might be coagulated—as a red coagulum, as a white concretion, or as a mixture of the two—could not exceed in weight 4·50 grains.

The greatest increase in the amount of fibrine in disease is up to 12 parts per 1000. I do not myself understand how blood so charged with fibrine could circulate; but, as the statement has once gone forth that such a blood was found, let us take that as the extreme example.

But I have found in the right auricle of the heart of a child, dying of pneumonia, thirteen grains of fibrine, which would represent 4333 grains of blood in health. Admitting, therefore, that the right auricle of this child was capable of holding not less than the auricle of an adult heart, and half as much as the whole of the right side—auricle and ventricle together, I mean—and that after death the auricle was left distended with 750 grains of blood, then it would follow, on the hypothesis that the concretion was formed after death, that the blood left in the heart contained 13 grains of fibrine in 750, or at the rate of 17·3 parts per 1000, which is absurd; for a blood so loaded with fibrine could not circulate at all.

In the above sentences, I have made over to the *post mortem* hypothesis of concretion more by double than any one of its own exponents could claim. For, in the case I have quoted for illustration, the auricle in reality had a dimension only capable of holding, at full distention, 240 grains of blood, and the auricle and ventricle together but 700 grains. Further, there was no red blood either in the auricle or in the ventricle, and, in fact, nothing save fibrine combined with water; but I have thought it best to extend to an absurd limit the *post mortem* hypothesis,

in order the more effectually to show its absurdity. I could labour out the question of weight from at least a dozen more cases from similar data, but the result would be simply a repetition. Any one desiring to follow out the same mode of proof, has only to remove a concretion from the heart of a patient dying at the acme of an inflammatory disease with the symptoms of concretion, as I shall give them in the end, and to proceed as follows:—to weigh the concretion in its moist state; to dry it gently on the water bath till it loses weight no longer; to weigh again, and take the last figure as the amount of fibrine. The dimensions of the heart being then calculated, and the amount of blood in the cavity of the heart in which the concretion was found also calculated, the excess of fibrine over the proportion of 3 per 1000 of blood may be readily ascertained.

It remains for me to adduce one other proof of the fact that fibrinous concretions may be formed during life. This proof, reserved to the last, may be considered the most direct, because it appeals to the visual sense. It is this: that an animal can be so placed that fibrinous deposit in its heart shall be induced—induced by experiment, by what I have elsewhere called the production of disease by synthesis; that the presence of such concretion being diagnosed by symptom, the animal may be made insensible to pain by a volatile narcotic; and that then, the respiration being sustained artificially, and the chest laid open, and the pulsating heart laid bare, the heart may be opened, and the concretion found there present, and removed. I have succeeded in various ways in thus producing concretion: I have succeeded by arresting a large tract of the circulation, as by passing a ligature beneath the trachea, carrying its ends back behind the vertebral column, and by the tourniquet screw stopping all the cerebral circulation. I once narcotised a dog with sulphuretted hydrogen; and, when the animal was entirely insensible, I allowed him to remain in the open air for several hours. He was still insensible at the end of nine hours, but was evidently sinking: I then laid open the heart, and found in the pulmonary artery a distinct fibrinous concretion.* But the best way of performing this synthetical experiment is to place a carnivorous animal in a closed chamber, and to fill that chamber steadily and constantly with pure and freshly made oxygen. A carnivorous animal so placed will live, I find, for a period of from twelve to thirty-six hours. When the animal begins to fail, or, in other words, to sink, there is manifested in all his movements the signs of obstruction of the heart—signs which will hereafter be more carefully indicated. The sinking fully set (for, before the sinking, there is no concretion, the prostration being the mere result of the obstruction), narcotic vapour is introduced into the chamber, and, insensibility complete, the vivisection is made. I have extracted large concretions from six animals under this condition. The colour of the clot has varied in these cases from red to perfect white. In one instance, a cat being the subject of experiment, the concretion was of pure white, and filled and distended the right auricle, and passed into the ventricle, and passed into the pulmonary artery. In this instance, the sinking symptoms were allowed to go on until death was imminent. Nevertheless, the heart was actively contracting when it was exposed, and continued to contract for nearly twenty minutes after the concretion was removed from its cavities.

I have thus offered, I trust, not a theory, but a complete demonstration, of the fact that fibrinous deposition is an event possible previous to death. I shall have to trace out, in the next lecture, the symptoms indicative of concretion, whereupon the opportunity will recur of adding further proof to the proofs already supplied.

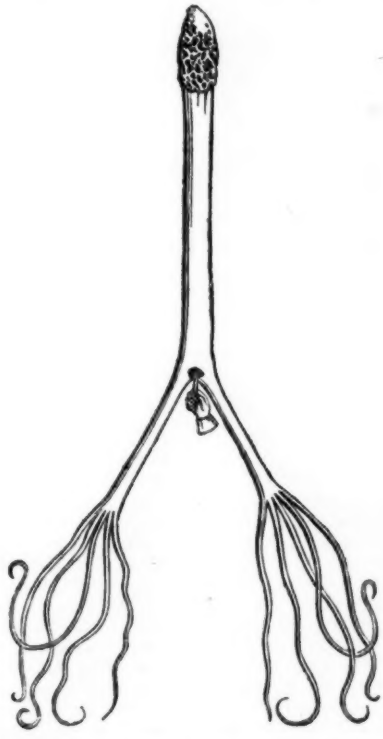
POSTSCRIPT. I append in full the account of the "serpent in the heart" case, quoted at the beginning of this lecture. Dr. May, the author of the case, was a man in good practice in this town in his day. We must not laugh at him; for there may be physician-physiologists, two hundred years hence, whom we would have forgive our ignorance as we forgive.

"The seventh of *October* this yeare current, 1637, the Lady *Herris* wife unto Sir *Francis Herris* Knight, came unto me and desired that I would bring a *Surgeon* with me, to dissect the body of her Nephew *Iohn Pennant*, the night before deceased, to satisfie his friends concerning the causes of his long sicknesse and of his death: And that his mother, to whom my selfe had given helpe some yeares before concerning the Stone, might be ascertained whether her Sonne died of the Stone or no? Upon which intreaty I sent for Master *Jacob Heydon Surgeon*, dwelling against the *Castle Taverne* behind St. *Clements Church* in the *Strand*, who with his Man-Servant came unto me: And in a word we went to the house and Chamber where the dead man lay: We dissected the naturall Region and found the bladder of the young man full of purulent and ulcerous matter: The upper parts of it broken, and all of it rotten: The right kidney quite consumed, the left tumified as big as any two kidnies, and full of sanious matter: All the inward and carnose parts eaten away and nothing remaining but exteriour skins.

"No where did we find in his body either Stone or gravell. The Spleen and Liver not affected in any discernable degree, only part of the Liver was growne unto the Costall membranes, by reason of his writing profession.

"Wee ascending to the Vitall Region, found the Lungs reasonable good, the heart more globose and dilated, then long; the right Ventricle of an ashe colour shrivelled, and wrinkled like a leather purse without money, and not any thing at all in it: the *Pericardium*, and Nervous Membrane, which conteyneth that illustrious liquour of the Lungs, in which the heart doth bath its selfe, was quite dried also: The left Ventricle of the heart, being felt by the Surgions hand, appeared to him to be as hard as a stone, and much greater then the right: Wherefore I wished M. *Heydon* to make incision, upon which issued out a very great quantity of blood; and to speake the whole verity, all the blood that was in his body left, was gathered to the left Ventricle, and contayned in it.

"No sooner was that ventricle emptied, but M. *Heydon* still complaining of the greatnesse and hardnesse of the same, my selfe seeming to neglect his words, because the left Ventricle is thrice as thicke of flesh as the right is in sound men for conservation of Vitall Spirits; I directed him to another disquisition: but he keeping his hand still upon the heart, would not leave it, but said againe that it was of a strange greatnesse and



Alongside the body of the "serpent", in the original drawing, is the following certificate:—

"That the 7. of October, this 1637 an Embrion of this forme and dimentions, as is here described was found in the Left Ventricle of the heart of *Iohn Pennant* Gentleman, of the age of 21. yeares, or thereabouts, Wee who saw it testifie under our hands:

Edward May Doctor of Physick.
Iacob Heydon Surgeon.
Elizabeth Herris Aunt unto the said *Iohn Pennant*.
Dorothy Pennant Mother to the said *Iohn Pennant*.
Ricard Berry
+Mrs *Gentlemans* marke.
This is my wives marke I testify *George Gentleman*."

The figure has been here reduced to the scale of one linear inch in three.

* Since the above remark was delivered, I have again performed this experiment three times; but the results have been imperfect. I do not, therefore, offer the experiment for repetition.

hardnesse; whereupon I desired him to cut the Orifice wider: by which meanes we presently perceived a carnouse substance, as it seemed to us wreathed together in foldes like a worme or Serpent: at which we both much wondred, and I intreated him to seperate it from the heart, which he did, and we carryed it from the body to the window, and there layed it out, in those just dimensions which are here expressed in the figure.

"The body was white of the very colour of the whitest skin of mans body: but the skin was bright and shining, as if it had beene varnished over; the head all bloody, and so like the head of a Serpent, that the Lady *Herris* then shivered to see it, and since hath often spoken it, that she was inwardly troubled at it, because the head of it was so truely like the head of a Snake.

"The thighes and branches were of flesh colour, as were also all these fibraes, strings, nerves, or whatsoever else they were.

"After much contemplation and conjectures what strange thing that part of the heart had brought forth unto us, I resolved to try the certainty, and to make full exploration, both for mine owne experience and satisfaction, as also to give true testimony to others that should heare of it: And thereupon I searched all parts of it, to find whether it were a pituitose and bloody Collection, or the like: Or a true organicall body, and Conception: I first searched the head and found it of a thicke substance, bloody and glandulous about the necke, somewhat broken (as I conceived) by a sudden or violent separation of it from the heart, which yet seemed to me to come from it easily enough.

"The body I searched likewise with a bodkin betweene the Legs or Thighs, and I found it perforate, or hollow, and a solid body, to the very length of a silver bodkin, as is here described: At which the Spectators wondered. And as not crediting me, some of them tooke the bodkin after me, made triall themselves, and remained satisfied, that there was a gut, Veine or Artery, or some such Analogicall thing that was to serve that Monster for uses naturall: Amongst whom the Lady *Herris* and the Surgian made tryall after me with their own hands, and have given their hands that this Relation is true. This Lady dwelleth at the signe of the Sugar loafe in S. Iames street in the *Convent Garden*."

Original Communications.

TREATMENT OF TETANUS BY ACONITE.

By Leonard W. Sedgwick, M.D., Boroughbridge.

Aconite having been recently recommended by Mr. Page and Mr. Campbell de Morgan as worthy of fair trial in tetanus, and all old established methods of treatment having failed in affording any hope of cure in this formidable disease, I thought myself justified in subjecting a case which came under my care last May to the full influence of the drug. Before offering any remarks, I will give a condensed history of the case from detailed notes taken at the time.

Case. A farmer's labourer, aged 30, strong and muscular, healthy and temperate, in jumping off a cart with a dung-fork in his hand, stuck it into his left thigh about three inches above the knee-joint on the inner and anterior surface. For some days the knee was stiff, and he was unable to work. Ten days afterwards, being much better, he began chopping sticks. About noon he got wet; and, whilst at his dinner, he was seized with a sharp pain between his shoulders; at the same time he thought he could not open his mouth as well as usual. On the eleventh day, he was unable to work from acute pain in the back and jaws.

On the twelfth day from the accident and the third of the tetanus, I saw him. He was then lying on his back, perspiring intensely, with an anxious painful expression of countenance. His jaws were nearly closed; the muscles of the back were very rigid; the loins were almost always some distance off the bed; the arms were not much affected; the legs were stiff; the abdominal muscles hard. Pulse 95, not very full. His tongue was moderately clean. The bowels were regular. He had no sleep. The urine was natural. I ordered him beef-tea and six ounces of brandy in the day; and five minims of Fleming's tincture of aconite in water every four hours. I laid open the wound, and removed a considerable piece of woollen cloth, which had been driven in from his trousers by the fork. To save repetition, I may here state that the wound healed steadily.

Fourth day. He was much the same.

Fifth day. The spasms were not so constant, but more violent. No aconitism had appeared. Seven minims of the tincture of aconite were given every four hours.

Sixth day. He was worse. When the spasms were relaxed, which was only for a very few minutes, the pulse was 68; during the spasms, it rapidly rose to 120, and became smaller. Opisthotonos was extreme; the jaws were clenched. Ten minims of the tincture were given every four hours; and he was ordered to have ten ounces of brandy daily.

Seventh day. Tingling in the hands and feet and slight giddiness having come on, the spasms had been much less severe. The pulse was weaker, and he had great sleeplessness and restlessness. The aconite was omitted; and twenty minims of chlorodyne were given in an ounce of water every four hours.

Eighth day. He continued easier, and slept well. The pulse was stronger. The spasms were not so frequent. He complained of much pain from flatulence. Twenty minims of tincture of sumbul were given with the chlorodyne. I may remark, that I have seen more benefit from sumbul in flatulence than from any other drug.

Ninth day. He took more beef-tea, etc., and was improving. The flatulence was diminished.

Tenth day. Immediately after being startled by a loud noise, he had a violent spasm, lasting some time. It recurred at intervals with great violence. He was ordered to have three minims of tincture of aconite and ten of chlorodyne in an ounce of water every four hours.

Eleventh day. He was much the same. The dose of tincture of aconite was increased to four minims.

Nothing of importance occurred until the seventeenth day. He continued the mixture, and the cramp decreased. The bowels having been confined several days, he had a turpentine enema, which greatly relieved him, and was repeated every other day. On the seventeenth day, some tingling came on, and continued until the nineteenth, though the aconite was reduced to a minim and a half every four hours. On that day, the aconite was suspended. The next day there was more cramp. The aconite was resumed for a week longer, and he gradually recovered. In less than three months he was at work again. The muscles were some time in regaining their extensibility after the tetanic spasms had ceased.

Remarks. The subjects for consideration are, the severity of the attack; the action of the aconite; the effect of the chlorodyne; the chances of spontaneous recovery; and the value of the case as a guide to future treatment.

It was unquestionably a most acute attack. A punctured wound, containing an irritating foreign body, prevents a man from working for ten days. He gets wet; and immediately tetanus sets in, and rapidly worsens. Every muscle of the body is racked with cramp; more than half his time he rests on his head and his heels; every step across the floor, every noise in the house, agitates him with this torturing spasm; and from this agony he is free for only two or three minutes at a time. To those who saw him, it was truly a most severe case.

If I have related honestly and faithfully what I most certainly saw, there will be little reason for any detailed argument as to the action of the aconite. When the symptoms of aconitism came on, then, and not till then, did the symptoms begin to abate. Twice, when the aconite was suspended, once to try the effect, once because the tingling and giddiness were becoming extreme, did the spasms return, to abate again on the resumption of the drug. This contratetanic action of the aconite is rendered more probable by the large doses which were originally borne, a part of the remedy seeming to be neutralised, as it were, by the disease, and only the superfluity able to produce its poisonous effect. This view will explain why smaller doses produced greater effects towards the end of the case, there being then less disease to combat.

Perhaps some justification is necessary of the administration of the chlorodyne. Perhaps it may be objected, that I marred the decision of the result by its use. I do not think so. I have often seen the good effects of chlorodyne in producing quiet without depression. Here was a man under the influence of aconite—sleepless, intensely and emphatically restless. My object was to cure him, not to conduct an experiment only. I saw reason to believe that chlorodyne would relieve the disagreeable symptoms probably produced by the aconite,

and it did so. But there was no repression of the spasms as a result of its use; for twice it was given alone, and each time the spasms returned, to be reduced again by the aconite. Useful, then, in relieving a disagreeable accident, it had no power to stand against the tetanus.

If I have succeeded in demonstrating the acute nature of the attack, the extremity of the symptoms, and the contraspasmodic action of the aconite, there can be little need to say anything of the chances of spontaneous recovery. He might have beaten the disease; but, from all we know of tetanus, we may be pretty sure that it would have gained the day.

What, then, is the value of the case? Does it contain hope for the future, or is its successful termination merely a fortunate accident? I cannot but think that it is full of hope, more especially when taken in connexion with previously reported cases. Of course it is not conclusive; it cannot be. But it points very decidedly to a certain path, by following which there is more hope of arriving at the wished for goal than by the old well trodden tracks. Aconite has never had that thorough testing that opium, for instance, has. So far, it seems to me most useful: further experience will determine its true value. But little persuasion should be required to induce a fair and extended trial of its powers, not by one or two, but by many; for, in such matters as this, "in a multitude of counsellors there is safety". Nor need we restrict our notice to aconite alone; it is only one of a class of medicines which has yet had little attention paid to it—all powerful, even violent, in their action, and many, I am convinced, containing "a soul of good" within them, which as yet we have not "observingly distilled out".

ANOMALOUS CASE IN A CHILD.

By D. W. SARGENT, Esq., Camberwell.

THE following case, which lately occurred in my practice, appears so anomalous that I am induced to record it. I am unable to recognise the symptoms, in the course which they followed, as belonging to any known disease; and the *post mortem* examination did not reveal any condition sufficient to account for death.

CASE. L. D., a fine healthy boy, of sanguine temperament, aged 3 years and 9 months, was quite well on December 29th, and was naturally relieved in his bowels three times on that day.

Dec. 30th. He was very sick and restless throughout the day: the ingesta only, with mucus, were vomited. The pulse was 84, feeble; the skin cool. He was very thirsty; the bowels were inactive.

Dec. 31st. He had nausea, but no vomiting; nor was there purging. There was no febrile heat. He was very restless and thirsty. The urine was natural, and passed freely. The pulse was 84; the skin cool; and the head clear.

Jan. 1st, 1860. He vomited very frequently, and was very thirsty. The urine was plentiful and natural. The skin was colder. He was perfectly conscious, and had no convulsions. The breathing, which had been panting, became more so, and there was more play of the nostrils; but there were no bronchitic nor pneumonic sounds. The pulse was 96, thready. He dozed occasionally for a few minutes, apparently from prostration. The pupils were natural or dilated, never contracted. The bowels were costive.

Jan. 2nd. All the symptoms continued, with more restless tossing and panting, and colder skin. The vomiting ceased in the evening. The urine was passed freely: there was no action of the bowels. He had no perspiration, cramps, or convulsions: he dozed frequently, but was perfectly conscious.

Jan. 3rd. After taking castor oil, he had a motion, natural in character, early in the morning. The vomiting did not return. He said once or twice that he was "better now"; but the coldness, panting, and sinking increased hourly.

Jan. 4th. Diffused warmth appeared over the surface in the morning; just after which he quietly breathed his last, in perfect consciousness.

The only indication of pain throughout the case was an occasional pointing to the throat just above the sternum; but the throat was perfectly free from disease. No eruption at any time appeared on the skin.

The treatment consisted at first in small doses of dilute nitric acid, to allay vomiting; and two calomel purges were given. Afterwards, bicarbonate of potash and aromatic spirits of ammonia were used; then solution of carbonate of ammonia; and subsequently, dilute sulphuric acid. Throughout the case, milk and wine, and lastly brandy, were given, according to circumstances.

POST MORTEM EXAMINATION. The brain was free from lesion throughout. There was no inflammation, nor extravasation of blood, serum, or pus, on the surface of the cerebrum or in the ventricles; neither was there any on the crura, the pons Varolii, or medulla oblongata, or beneath the pia mater, in the cavity of the arachnoid, between the arachnoid and dura mater, or between the dura mater and skull. All these parts were free from opacity or thickening. There was some vascular injection of the membranes at the base of the cerebellum; but it was removable by washing. No trace of disease could be found in the lungs and heart. The left auricle contained a soft natural coagulum; the left ventricle was empty. The right auricle and ventricle contained slightly coagulated blood. There was no engorgement of the pulmonary vessels. The stomach was half full of a straw-coloured watery fluid, which was not tested. The organ appeared healthy: the mucous coat was not injected. The liver was natural in size and external outline, and presented no morbid appearance. The intestinal canal was healthily distended, and was free from injection or inflammation. The bladder was quite empty and collapsed.

TWO CASES OF FALLS FROM HEIGHTS FOLLOWED BY VERY SLIGHT INJURY.

By GEORGE MALLETT, Esq., Bolton-le-Moors.

IN a recent number of the JOURNAL, Dr. Fleming writes that we ought to record only good cases; meaning such as present something new and of living interest in diagnosis or treatment, or illustrative of some practical rule already established. There appears to me to be so much of truth and wisdom in these remarks, that they ought to command universal assent; at any rate, they meet with my cordial approbation. Nevertheless, I am afraid I am going to act in opposition to them, by giving a brief relation of two cases, that would scarcely be ranked amongst those that ought to be published, if we construe the above rule very rigidly, as they do not indicate anything novel either in treatment or diagnosis.

I send this paper for publication, believing that similar cases to these, therein related, cannot often occur, without suspending on their behalf one of the ordinary laws of nature—that of gravitation.

The two following cases are those of men falling from such heights as would, under most circumstances, be followed by instant death, but they escaped; and therefore I think they are sufficiently interesting to entitle them to be placed upon record.

CASE I occurred about sixty years ago; and about twenty-five or twenty-six years since, it came to my knowledge under the following circumstances.

At the period last named, I was requested to visit a poor man, who had been suffering severely for four days. I found him in great agony from retention of urine, none of which had passed from the bladder for four days. Many ineffectual attempts had been made for his relief by an irregular practitioner, but, unfortunately, he had been unable to introduce the catheter. The patient was about 70 years old, and presented the following symptoms. The skin was hot; the face red, and much emaciated; the pulse was rapid and very feeble; the mouth and tongue hot, parched, and covered by a thick coating of dark fur—in fact, presenting such an appearance as would be expected from so long a retention of urine. With great difficulty, a large catheter was introduced, and from five to six pints of urine were drawn off: the first was very ammoniacal, and the latter portion semipurulent and bloody. The catheter was introduced twice a day for three days, when the man died.

The day before his death, he was very cheerful; and, in a jocular manner, said, "that in his younger days he had met with a bad fall, but he feared he had then suffered a worse one, as he had fallen into the hands of the doctor." He explained himself by stating, that when placing some of the masonry upon the highest part of the tower of a church, called St. George's, in this town, his foot slipped, and he was precipitated from the top to the bottom, the distance being at least one hundred and twenty feet; and that the fall was uninterrupted by any intervening scaffolding, so as to diminish the impetus of the descent. He added, that he was so little in-

jured, that he was able to resume his occupation in a few days.

Upon making subsequent inquiry, I found his story to be strictly correct, with the addition, that his head fell upon some sheet lead, which was extended upon the ground; and that the force was so great, that a deep impression was made upon the lead by the skull.

Case II. On December 8th, 1859, I was called upon to visit another curious case, which recalled to my recollection the notes I had made of the preceding one.

A collier, aged about 50, was descending a pit or coal-mine in a way frequently followed; but certainly such a mode of descent ought not to be permitted, as it is unquestionably dangerous. The descent is made by placing one foot in a ring or kind of stirrup, at the same time holding the rope with one or both hands. He had not descended more than four or five yards, when by some accident, which he cannot explain, his foot was knocked or slipped out of the ring, and his hold of the rope at the same time giving way, he fell at once to the bottom of the pit, a distance of at least one hundred and thirty-five feet. There was nothing to break or mitigate the force of the fall. He was found alive, but groaning, and constantly muttering, "O my children! O my children!" He was brought up; and I saw him about an hour after the accident. He appeared to be moribund. The pulse was not to be felt at the wrist, the extremities were cold, and respiration very difficult and painful. The slightest motion gave exquisite pain, and I could not attempt to ascertain what amount of injury the trunk had sustained. There was some contusion with extravasation of blood at the posterior part of the right thigh, a slight laceration of the scalp, and the knuckles of both hands were slightly excoriated and swollen, probably from his instinctively throwing out his arms in the vain hope of saving himself, and so striking the sides of the pit. These were the only injuries I could discover, as all the bones of the extremities were sound. He was placed in bed in the easiest position, which was lying on his back, but rather inclining to the right side. Bottles filled with hot water and hot bricks were applied to the extremities; and brandy and water was ordered to be given every half-hour, until warmth was restored.

I then left him, and certainly did not expect to see him alive again; but, to my surprise, on the following morning, I found him much improved. His pulse, although still feeble, was regular and distinct; warmth had also returned to the extremities. The bladder had emptied itself naturally. The chief complaint now appeared to be on the right side; a careful examination of which showed that three or four of the lower ribs were fractured, which, upon the slightest movement, caused great suffering, and rendered the breathing so difficult, as to threaten instant suffocation. The chest was bound up; and beef tea, etc., were ordered.

On the third day, the bowels were moved, the pain diminished, and the respiration easier. From this time, the improvement was gradual, and without interruption; so that on December 25th, he was so much improved,, as to be able to walk down stairs, and the only remaining complaint was a slight pain at the side when drawing a deep inspiration.

I have said little or nothing respecting the treatment, simply because little or no treatment was required. It was one of those numerous cases of which it has been justly said, "Nature cures, and man has the credit."

Undoubtedly, it is difficult to conceive, under any circumstances, how the human frame could without greater injury have sustained such shocks as must have been inflicted upon them in these cases. It would have been natural to suppose that the momentum or force acquired by the bodies falling through so great a space, would have been sufficient to dash them into mangled and disorganised masses, more especially as they could not have fallen upon substances more unfavourable—lead in the one case and the solid rock in the other.

The Yellow Fever. We are requested by the Brazilian minister to state, on authority, that the belief of the Portuguese Government of yellow fever prevailing in all the ports of Brazil, is contradicted by assurances which the Brazilian minister received from the Imperial Government by the last steamer, that the health of those ports was then good. The extreme improbability of an epidemic simultaneously appearing in all the ports of a coast more than 3,000 miles in extent, in many of which the yellow fever has hitherto been unknown, need hardly be pointed out. (*Times.*)

Periscope.

MIDWIFERY AND DISEASES OF WOMEN.

OVARIOTOMY.

In several numbers of this Journal for 1858 and 1859, we have referred to several cases of ovariotomy performed by Mr. Spencer Wells, Surgeon to the Samaritan Hospital in London. He has published the results of his experience in the *Dublin Quarterly Journal of Medical Science* for November 1859; and has there related the histories of eight cases—six of recovery from the operation, and two of death. He has reprinted his paper separately; and from this we learn, in addition to the information already given, that he operated in four other cases in October last, in two of which the patients died, one four days after the operation, and the other, of acute tetanus, eight days after. Of the six cases, too, formerly recorded as convalescent, one woman, who was operated on in November 1858, went on apparently well until the summer of 1859, when she complained of intestinal obstruction, and died on August 26th. On *post mortem* examination, there were found several strictures of the small intestine, caused by malignant deposit. Mr. Wells's cases, which are very completely reported, will prove valuable to the statistician of operations for ovarian disease. Our object here is to call attention to some very sensible remarks which Mr. Wells makes on the means of diminishing the mortality after ovariotomy. These we transfer to our pages, with very slight verbal alterations or curtailments.

Mr. Wells proposes, he says, to consider how our object of saving life may be obtained.

I. By the selection of proper cases only for operation.
II. By the determination of the stage of the disease in which the operation is most likely to prove successful.
III. By careful preparations to avoid all unnecessary sources of danger.
IV. By the use of anæsthetics to lessen the risk of *shock*.
V. By certain precautions in the performance of the operation.
VI. By careful after-treatmant.

I. *Selection of Cases.* It may not be quite unnecessary to say that the surgeon should be quite sure the tumour is ovarian before he determines to perform ovariotomy, when we remember that this operation has been attempted in cases of pregnancy, of hydatid tumours of the liver, of colloid disease of the peritoneum, of other malignant growths within the abdomen, of fibrous tumours of the uterus, of excessive fatty deposit in the integuments, of ascites, and in cases where there was no tumour whatever. With all our care, there are cases in which doubts can only be entirely removed by an exploratory incision. Mr. Wells has no doubt that the surgeon who would only operate on cysts containing fluid which could be easily emptied, and, if non-adherent, withdrawn through a very small incision, would be more successful than another surgeon who removed solid tumours requiring the long incision. But many cases on record show that the presence of extensive adhesions and large solid masses are quite consistent with a successful result. The operation certainly ought not to be performed in cases of coexisting disease of some important organ. If all the patients who had died after ovariotomy from old standing diseases of the lungs or kidneys were eliminated from the catalogue, the results of the operation would appear in a far more favourable light. Whether the existence of adhesions is rather favourable than otherwise is a question deserving of further inquiry.

II. *Period for Operation.* There are surgeons who would only operate as a forlorn hope, when it is quite clear that the patient's days are numbered, and that if her life be shortened by the operation she cannot lose very much. Some, on the contrary, argue that this plan of operating *in extremis* has brought, and does bring, the operation into undeserved discredit; and that, the less the general health of the patient has been shattered by the disease, the more likely is she to survive a severe operation. To this it is replied that ovariotomy is an exception to the general rule, and that the most successful cases are those in which the patient has been most reduced by the disease, or the peritoneum most altered. This point requires more extended inquiry.

III. Patients have been exposed to unnecessary danger by being submitted to operation in a theatre, or in cold rooms, or in dry overheated rooms; or their limbs have been imperfectly

covered, and not protected from the fluid emptied from the cyst even after it has ceased. All this has been insisted upon by Dr. Clay, Dr. F. Bird, and others.

iv. *Use of Anæsthetics.* The materials do not exist for a trustworthy comparison of the results of ovariotomy in cases where ether or chloroform were and were not administered. This is a question which can only be settled by future and more extended observation; but Mr. Wells believes that the mortality must be diminished by the use of anæsthetics. The sickness which sometimes follows the use of chloroform is, of course, a great disadvantage, and the depressing effects might, in some cases, be too great; but on the whole he thinks that, by greatly lessening the anxious apprehension of suffering which so often brings patients into an unfavourable condition for undergoing any operation, and by entirely preventing the shock at the time of the operation caused by the pain, by the knowledge that the abdomen was laid open, and by the manipulations of the operator and assistants, the good effects of anæsthetics must far outweigh any occasional ill consequences.

v. Supposing that all the necessary preparatory measures have been taken—a quiet, well-ventilated room secured, a good nurse provided, a couch and mattress placed in a good light, the room warmed to about 70°, and the air kept from being too dry by a kettle of water boiling on the fire; the patient dressed in a warm flannel gown, and the legs kept warm by woollen stockings and hot water cans, if needful; a good supply of soft, new, well-scalded sponge at hand; plenty of water at about 96°; soft flannel moistened in this water to protect any exposed intestines; all the necessary instruments for incision, tapping, securing vessels and the peduncle, and uniting the wound; an abdominal bandage; and a clean, warm bed ready to receive the patient; with chloroform, ether, wine and brandy;—there are still some points of practical importance which deserve notice.

1. It is unfair to a patient to expose her to any possible risk of putrid infection from students or surgeons engaged in the dissecting-room. On this ground Mr. Wells thinks the anatomical students at the large hospitals should not be admitted to the bed-side, and no visitor should be invited who has recently been engaged in a similar manner. Those present should only be enough to afford the necessary assistance to the operator, not crowding round him, nor impeding the supply of air to the patient.

2. The incision should be exactly in the median line, so that integument and aponeurosis only need be divided before arriving at the peritoneum; it should not reach sufficiently near the pubes to endanger the gravitation of serum into the areolar tissue around the bladder and that of the pelvis generally, still less to endanger the bladder. Without running this risk, sufficient space can be often obtained below the umbilicus. If more be required, the incision can be carried upwards towards the ensiform cartilage, still in the median line, but with a curve round the umbilicus.

3. In case of any doubt as to the exact boundary of the cyst, it is far better to open it, than to run any risk of unnecessarily detaching the peritoneum from the abdominal walls.

4. Where the cyst contains fluid, it is well to use a large trocar, in order to save time; and to have an elastic tube attached to the cannula, so that the fluid may be removed without wetting the patient, and while the abdomen is still covered. Tapping the abdomen with an ordinary trocar is a very clumsy proceeding. In all cases of tapping the chest or abdomen, or opening large abscesses, Mr. Wells has, for several years past, used the cannula of Schuh, of Vienna, and has attached an elastic tube to it. More recently he has used a still simpler and equally convenient instrument, first described by Mr. Charles Thompson, of Westerham, in the *Medical Times and Gazette* of March 27, 1858. The trocar is made to fit the cannula closely, like the piston of a syringe; there is an opening from the lower part of the cannula, on to which an elastic tube can be fastened. Mr. Wells has added a stop-cock to the elastic tube, a few inches from the cannula, in order that the rate at which the fluid flows off may be regulated, should the patient suffer from its too rapid evacuation.

In ovariotomy the entrance of air into the sac is of no importance, and the mode of using this instrument is apparent; but in simple tapping of ovarian cysts, as in evacuating fluid from the pleural or peritoneal cavities, or from the sac of large abscesses, it is of vital importance to prevent the entrance of air, and this may be done by drawing the piston back, placing the end of the elastic tube in a basin of water, and withdrawing the air from the tube and cannula by suction, or by a syringe fitting the end of the cannula. If the end of the tube be kept under water, and the piston be pushed forward, ready for use, the elastic tube is kept filled with water, which meets the fluid from the cyst when the operation has been commenced, and a syphon is formed.

5. In breaking down adhesions it is far safer to use the hand than the knife. Should any portion of adherent omentum or mesentery contain large vessels, these should be tied or twisted at once, to prevent bleeding into the peritoneal cavity, and as it might be very difficult to find the bleeding point if once separated. In case of firm, tough adhesions the écraseur might prove very useful. Should there be adhesion to the intestines, or any viscus so firm that separation is very difficult, it might be better to cut away that portion of the cyst, leaving it adherent, than to run any risk of injuring an important organ; but in this case it would be desirable to remove the inner secreting coat of the cyst, if possible.

6. In drawing out the cyst, caution is required that the cyst only is drawn out; and, in removing a solid tumour, care is necessary that it does not fall suddenly and tear through any portion of the peduncle, thus giving rise to hemorrhage.

7. In securing the peduncle, ligatures were used in two cases, clamps in all the others; but, in two of these, ligatures also became necessary, as in each case a portion of peduncle slipped from the grasp of the clamp. This danger, however, was avoided in the other cases, by taking care not to cut the cyst or tumour too close to the clamp, but leaving at least an inch projecting beyond the line of constriction. If ligatures be used, it should be remembered that a single one can very rarely be sufficient; and that cases are on record where patients have died on the table from a single ligature slipping, and it being afterwards impossible to find the bleeding vessels. The peduncle should be carefully transfixed, and tied in portions not broader than a finger. Perhaps it might be well to divide the round ligament with a knife, only tying the remainder of the peduncle; and it is extremely probable that the *écraseur* may completely do away both with the ligature and the clamp; as it might be used very slowly, and the peduncle not entirely separated for some hours after the wound was closed.

8. The peritoneum should be carefully cleansed from all blood, clotted or otherwise, or any of the contents of the cysts which may have escaped. Far more good is done by removing matter which would subsequently decompose, than harm by any irritation of the peritoneum with soft sponges. In this and previous stages of the operation, the intestines should be kept as much as possible from protruding, by an assistant holding the edges of the wound together; and, when intestine is exposed, it should be protected by the warm moist flannel. Artificial serum has been used for this purpose, instead of plain water; but Mr. Wells prefers the latter.

9. In cases where it can be done without undue traction upon the uterus, the fixing the stump of the peduncle outside the peritoneal cavity appears to be a most important safeguard against peritonitis, and the low fever caused by absorption of the putrid matter flowing from the decomposing stump. Any one who sees the quantity of filthy sanies surrounding the stump as it lies on the abdomen of a patient day after day, before it separates, must be struck with the danger attendant on such a process going on within the abdomen, even though this diffusion were checked by protecting effusion of lymph.

10. For bringing the edges of the wound together, gilded harelip pins—or pins of the *passive* iron wire introduced by Dr. Simpson—with the twisted suture, are the most trustworthy. The whole depth of the wound is brought together, and the pins act as splints, preventing any escape of intestine—an accident which has happened by the giving way of ordinary sutures. A few superficial sutures of silver, or iron-wire, may also be advisable to secure perfect apposition of the divided edges of skin. Mr. Wells has found cotton-wool the most comfortable covering for the wound; and, as an abdominal belt, nothing answers better than a double fold of flannel, kept from slipping upwards by a strip of linen passing round each thigh, and pinned to the lower edges of the flannel. Experiments on dogs, rabbits, and guinea-pigs, have convinced him that it is better to perforate the divided edges of the peritoneum by the harelip pins, so as to press two folds of the peritoneum against each other, than to run any risk of contact of the peritoneum with the divided tissues of the abdominal parietes.

vi. On careful nursing and judicious after-treatment a great share of success must depend. In many of the cases of ovariotomy reported, it seems perfectly wonderful that the patient has survived the after-treatment. Bleeding, leeches, blisters, calomel and purgatives, and starvation, have often been prescribed. The wonder is that so many have survived all this.

The great objects are, to keep the patient perfectly quiet, free from pain, and thoroughly clean; the surgeon should not be led by the fact of the pulse being very rapid to fear peritonitis, and adopt active measures. Mr. Wells is of opinion that the rapidity of the pulse is owing, in a great measure, to the return of the heart to its normal situation; but, whether this be so or not, it is certainly no ground for active measures. With the exception of opium, given not so as to confine the bowels, but by enemata, in small quantities occasionally, to relieve pain, Mr. Wells attaches far more importance to hygienic measures than to medicinal treatment. A well ventilated room, warm, but not unpleasantly so to the patient, the air comfortably moist, and perfect quiet, are the chief requisites. The patient should not get up to pass urine, but the catheter should be used every six hours. One good effect of the opium is to keep the bowels quiet; but if there be much flatulence, it is not well to keep up the state of constipation too long. A little soda in peppermint water, or chloric ether with aromatic confection, seems to give as much comfort as anything; but flatulence is always a troublesome symptom for some days. The intestines seem to miss their accustomed support or pressure. The application of warmth and moisture to the abdomen, by means of a warm linseed-meal poultice, is particularly grateful to the patient; and Mr. Wells is disposed to regard it as of considerable importance in the after-treatment. As to food, he has directed beef-tea, arrow-root with or without wine or brandy, rice-water, and barley-water, or a little tea and dry toast, to be given very much as the patient wished for them, and, after a few days, some solid food. The fœtid stump he has kept covered by a muslin bag of peat-charcoal, changed once or twice a day. The wound is not disturbed until union is perfect; and if gilded pins or metallic sutures be used, they may be left with safety for many days; though the best plan is probably to remove the pins on the third or fourth day, leaving the superficial sutures three or four days longer. So soon as the patient is able to get about pretty well, country air is the best restorative.

Reviews and Notices.

On the Injurious Effects of Mercury in the Treatment of Disease. By S. O. Habershon, M.D.Lond., Fellow of the Royal College of Physicians; Senior Assistant-Physician and Lecturer on Materia Medica and Therapeutics at Guy's Hospital, etc. Pp. 86. London: Churchill. 1860.

The title of this book at first sight appears rather formidable; and it might possibly be imagined that Dr. Habershon had committed himself to preaching a furious crusade against one of our most time-honoured articles of materia medica. It is not so, however. The author is not so extreme in his views; and he admits the beneficial use of mercury in certain cases which he specifies. His object is rather to moderate its use; and while he propounds certain doctrines as to its abuse which are recognised by a large number of intelligent members of the profession, he even goes beyond most of them in denying that, in such instances as acute diseases of serous membranes, and of such structures as the brain, lungs, etc., mercury is *required* for the alleviation of the malady.

A summary of the author's views is given in his third chapter.

"The more special instances in which mercury is injurious are the following: 1. In strumous diseases of the brain, lungs, abdomen, skin, bones, etc.; 2. In degenerative changes of advanced life, as atheromatous deposit in the vessels leading to apoplexy, ramollissement of the brain, etc., in fatty degenerations of the heart, aneurism. 3. In fevers and exanthems, as scarlet fever, typhus, measles, small pox. 4. In conditions consequent on exhaustion, whether from over fatigue, preternatural drain, mental anxiety, insufficient food, loss of blood. 5. In passive congestions of the lungs, uterus, etc., in states of weakness and loss of power. 6. In cancerous diseases. 7. In degeneration of the kidneys. 8. In diseases of the mucous membranes it is of very questionable utility, as bronchitis, enteritis, cæcal disease, dysentery, etc. 9. In diseases called inflammatory, as of the membranes and substance of the brain, of the lungs and pleura, of the pericardium and peritoneum, in croup, etc., whilst in some cases the products of disease become absorbed and health restored, in very many instances the malnutrition consequent on the mercury leads to increased effusion. 10. In rheumatism and its complications the advantage is not equivalent to the injurious effect.

"As to the conditions where the administration of mercury is *advantageous* we may enumerate:—1. In retained excretions, as from the bowels, liver, etc., it is often of great value. 2. As a speedy and efficient purgative. 3. As an excitant to the excretory organs in some forms of dropsy, of embarrassed heart, of bronchitis, etc. 4. In small or occasional doses where its more free or continued use would be detrimental, in some of the classes to which we referred to its administration as being injurious. 5. In syphilitic diseases. 6. In some forms of gastrodynia and irritability of stomach the symptoms are alleviated by it. 7. In Asiatic cholera, although most severe cases have recovered after its administration, it is of doubtful efficacy. 8. Its local application in some cutaneous diseases and chronic ulceration is certainly salutary." (Pp. 25-26.)

This is by no means a work *de trop;* for, notwithstanding that many practitioners may have long recognised the inapplicability, or at least inutility, of mercury in several of the cases in which Dr. Habershon condemns it, we fear that even yet sufficient caution is not exercised in its use. We would recommend practitioners to study this little work, and to test by their own experience the conclusions of its author, especially in regard to the question of the use of mercury in the inflammatory diseases of serous membranes and parenchymatous organs.

Stricture of the Urethra: its Complications and Effects. A Practical Treatise on the Nature and Treatment of those Affections. By Robert Wade, F.R.C.S., Senior Surgeon to the Westminster General Dispensary, etc. Tenth edition (with engravings), considerably enlarged. Pp. 354. London: Churchill. 1860.

Mr. Wade requires no introduction. He is well known as having devoted great attention to the subject of urethral stricture, and especially as the strong advocate of the use of potassa fusa in certain cases of this affection. The edition of his work before us is, with one exception, a very complete account of his own views on the subject, and of those of other surgeons who have treated of it. The exception to which we allude consists in the entire omission (as far as we can see) of any reference to the valuable work of Mr. Henry Thompson on the same subject—an omission which is the more striking and to be regretted, inasmuch as Mr. Wade manifests an extensive acquaintance with the literature of stricture, and makes numerous allusions to the writings of surgeons who have made this disease the object of their study.

The author's views on the treatment of stricture are thus summed up in his concluding remarks:—

"1. Simple dilatation is the method which should commonly be practised; and, in the great majority of cases, it will succeed in affording satisfactory and permanent relief. 2. There are numerous cases in which the relief obtained by this method will be neither sufficient nor permanent; and in these the patient must depend for any considerable improvement in his condition, either on the application of caustic to his stricture, or on its division by some cutting instrument. 3. Internal section, when practised anterior to the bulb, is attended with very little risk; but when resorted to for obstruction at the urethral curve, it has not unfrequently produced unfortunate results. External division, whether performed according to the old method, in impermeable, or to that of Mr. Syme, in 'permeable' stricture, from its disastrous effects, is an operation which can be justifiable only in the most urgent cases. 4. Mr. Syme's operation, being applicable only to 'permeable' obstructions, will very seldom be required; for, when an instrument has been passed through a stricture, the greatest difficulty in the case has been surmounted, and, with few exceptions, the remainder of the treatment can be accomplished without the resort to a hazardous proceeding. 5. In whatever manner a stricture may be divided, it will, in most cases, be necessary to have recourse to the regular use of the bougie or other dilating instrument. 6. Generally, in the more in-

tractable forms of stricture, the careful use of the potassa fusa will be attended with most beneficial results, and therefore render unnecessary the performance of operations more or less perilous." (Pp. 353-4.)

On Chronic Alcoholic Intoxication, or Alcoholic Stimulants in Connexion with the Nervous System; with a Synoptical Table of Cases. By W. Marcet, M.D., F.R.S., Fellow of the Royal College of Physicians; Assistant Physician to the Westminister Hospital, etc. Pp. 169. London: Churchill. 1860.

Chronic alcoholism is thus defined by Dr. Marcet, copying the words of Dr. Magnus Huss, of Stockholm:—

"The name *chronic alcoholism* applies to the collective symptoms of a disordered condition of the mental, motor, and sensory functions of the nervous system, these symptoms assuming a chronic form, and without their being immediately connected with any of those (organic) modifications of the central or peripheric portions of the nervous system which may be detected during life, or discovered after death by ocular inspection; such symptoms, moreover, affecting individuals who have persisted for a considerable length of time in the abuse of alcoholic liquors." (P. 2.)

The symptoms then depend, according to Dr. Marcet, on a "functional" disturbance of the nervous system, which may last even long after the habit of excessive drinking has been given up. *En passant*, we think the word "functional" objectionable, unless qualified in some way. Surely Dr. Marcet does not believe that there can be any obstinate derangement of the function of any tissue or organ unless there be some change in its structure—even though it be undiscoverable to ordinary ocular examination—or some modification in the condition of the blood supplied to it. With this limitation, we may accept his use of the term "functional".

The characteristic symptoms of chronic alcoholism, are a peculiar complexion, often sharp features; or, if the patient be fat, injected cheeks and nose, which have a violet appearance; trembling of the limbs, often of the whole body, or a want of steadiness and coordination in the movements, not very unlike incipient chorea; want of sleep and great restlessness, attended with extraordinary visions, mostly of a painful kind; giddiness and headache; hallucinations (but to a less degree than in delirium tremens); great weakness, especially in the knees and hips; and difficulty of breathing.

In the treatment of the morbid state characterised by this train of symptoms, Dr. Marcet has found oxide of zinc a very useful therapeutic agent; and, towards the latter part of the work, after referring to the observations of Dr. Herpin and other physicians on the use of this drug in epilepsy, etc., he describes the circumstances under which it may be given. It is not to be used indiscriminately; the benefits arising from it are generally observed in cases unattended by any chronic organic disorder, and in individuals of sound constitution. Lung-affections seem to diminish its efficacy—rheumatism also; but there is, Dr. Marcet says, a state sometimes attending chronic alcoholism which may be mistaken for rheumatism. When gastric symptoms are very urgent, such as great pain in the stomach, with much vomiting, Dr. Marcet prescribes opium at night, in the form of compound soap pill; and sometimes, in such cases, the substitution, for a few days, of carbonate of ammonia for oxide of zinc is attended with benefit.

The usual effects of the zinc are thus described:—

"First, the sleep is improved, the patient does not lie so long awake at night, and the nightmare becomes less frightful; then, the hallucinations decrease, the patient is no longer troubled with black specks passing constantly before his eyes, or with the sight of imaginary objects, such as insects or other animals crawling about the room, and extraordinary noises are no longer heard; the attacks of trembling also diminish in frequency if not in intensity, and gradually pass off. This improvement is attended with an increase of appetite, as well as a marked diminution of the gastric symptoms; and when the patient can take food and digest it well, he may be looked upon as in a fair way towards recovery. Gradually, muscular power returns, and the mental depression, which frequently accompanies chronic alcoholism, disappears; the patient becomes cheerful and happy, and expresses with gratitude his joy at feeling quite well. When the disorder is complicated with an organic disease, I have found it advisable to begin with oxide of zinc, in order to alleviate as much as possible the functional derangement of the nervous system, and then to adopt such a course of treatment as may be considered the most suitable to the occasion." (Pp. 104-5.)

After this, there follow the records of several cases of chronic alcoholism treated by oxide of zinc; and at the end is given a synoptical table of forty-eight cases.

A System of Instruction in Qualitative Chemical Analysis. By Dr. C. Remigius Fresenius, Privy Aulic Councillor of the Duke of Nassau; Director of the Chemical Laboratory at Wiesbaden. Fifth edition. Edited by J. Lloyd Bullock, F.C.S. Pp. 310. London: Churchill. 1859.

This is a new edition of a well known and approved work of one of the masters of German analytical chemistry. The translator has been aided by the author, who has communicated a large amount of original matter to the English edition while it was passing through the press.

Lectures on the Development of the Gravid Uterus. By William O. Priestley, M.D., Fellow of the Royal College of Physicians of Edinburgh; one of the Lecturers on Midwifery at the Grosvenor Place School of Medicine; etc. Pp. 110. London: Churchill. 1860.

This course consists of eight lectures, which first appeared in the pages of a contemporary, and have been reprinted, with some additions, in their present form. With a well digested summary of the investigations which have been made on the subject of the development of the gravid uterus, Dr. Priestley has incorporated the results of such observations as he has himself made, and has thus produced the most complete treatise on the subject that we possess.

British Medical Journal.

SATURDAY, JANUARY 28th, 1860.

THE LEGAL VALUE OF A COMMA IN READING THE MEDICAL ACT.

It is quite clear that, if the quacks cannot drive a coach and six through the provisions of the Medical Act, they are pushing their more nimble gigs through in every direction. So many conflicting decisions have been given with respect to it, that all the rascals hanging upon the skirts of the profession are watching their opportunity to either clear or evade it. Seemingly, they look upon it as good steeple-chasing. One scrambles through the hedge under the pretence that he was in practice before 1815; another bursts through a gap, with the excuse that the initials M.R.C.S., which he puts on his door-plate after his name, refer to his being a Member of the Reformed College of Surgeons; and still another attempts to sneak past the dread barrier by styling himself a surgeon-accoucheur; and, to end the series of nefarious schemes, we have Coffinites and herb-doctors, who boldly proclaim that they are *not* registered according to the Act. As this law was enacted mainly for the purpose of protecting the public from the snares of unauthorised pretenders, it does seem to us as clear as daylight that such should be the view taken of its clauses by persons in

authority. Such, indeed, is the fact in the majority of cases; but we continually have to record decisions which prove that our magistrates do not all read through the same spectacles.

Let us take, for instance, the case of Thomas Airey, who was charged at the Bristol Police-Court, in October last, with taking the title of Dr., and of affixing the initials M.R.C.S. and M.R.C.P. after his name. This pretender admitted that his name was not on the *Register*, but put forward the impudent claim that he was a Member of the Reformed College of Surgeons in America. The magistrates, however, acting upon the straightforward reading of the Act which we have given, found that the use of these initials did imply that he was a physician and surgeon, whereas, in fact, he was not so recognised; and he was accordingly fined £20.

The justice of this decision seems so evident, that our only wonder is that any other judge should give a conflicting judgment. A case has just turned up, however, in the Queen's Bench, in which the Lord Chief Justice Cockburn and Mr. Justice Crompton confirmed a decision which appears to us to throw the whole question again into confusion. It appears that, on October 11th last, an information was laid before the magistrates at Kingston-on-Thames against Frederick Gould, a druggist and dentist, for using the title of surgeon without legal qualification. A woman named Charlotte Tenniswood stated that the defendant had supplied her with a liniment for an injury of the arm which she had sustained; and that she had paid one shilling for it. It appeared also that she had noticed the word "surgeon" over his door, and had in consequence gone to him; and that word was followed by "and mechanical dentist"; but it was also stated that she went to his shop, as that of a "chemist and druggist", in order to be attended more cheaply than by a doctor. In considering the information, which was laid by Dr. Ladd, the Secretary to the London Medical Registration Association, the magistrates were of opinion that the word "surgeon" was used by Gould merely to express what branches of the business of a dentist he carried on, and not to represent himself as a surgeon within the meaning of the Act. They therefore dismissed the application, but granted an appeal, in order that the superior Court might decide whether, on the evidence, Mr. Gould was guilty under the Act. The judges decided that the magistrates had exercised their discretion in determining from a certain state of facts, and declined to interfere. Judgment was therefore given for the defendant Gould.

Thus it appears, according to the highest law authorities in the land, that any person may style himself "surgeon" on his door, notwithstanding the 40th section of the Medical Act, provided he follows that forbidden word up with "mechanical dentist". Nay, it would further appear that this cunning gentleman has taught his fellows the saving virtue of omitting a comma; inasmuch as, if his self-imposed titles had been "surgeon, and mechanical dentist", he would clearly have made himself liable; but the words, without this insignificant stop, are held only to imply the mere operative part of dentistry! Quacks of all kinds, take notice, and for the future ignore commas with religious care. The poor creature who went to this pretender, did so, on her own admission, because she saw the word "surgeon" on his door. She was deceived and snared into his net by its use alone; and the judgment which says that the word was not used in an illegal sense, because other words were connected with it, seems to us indeed extraordinary. Be that as it may, it is quite clear that some alteration of this portion of the Medical Act must be demanded of the Legislature, if our efforts to protect the public and ourselves from quacks are to be evaded in this style.

If the words "surgeon and mechanical dentist" may be assumed with impunity, why may not any person call himself "surgeon and bone-setter", or "surgeon and accoucheur", or "surgeon and anything else?" and why should the legitimate practitioner take the trouble or incur the expense of registering at all? As far as we can see, the Act ought to provide that no title whatever shall be assumed by any unqualified man that can lead people to imagine him to be a surgeon, physician, or general practitioner; and, if the law as it at present stands is not sufficiently explicit on this point, we think it is but the duty of the Medical Council to see that it is properly amended. Our Registration Societies will come to a stand still if a few more such decisions as that of the Kingston magistrates, confirmed by the Chief Justice, are placed upon the Record; and the sooner the attention of the whole medical profession is called to the matter the better.

THE WEEK.

THAT medical men should be called on to perform their duties, and to exercise their skill to its utmost, in seasons of the greatest danger and distress, is without doubt inseparable from the profession which they follow. But the spirit in which the duty is undertaken tells something more: it shows that the principles which actuate the members of our profession are the highest which can lead man in his duty towards man. Of the truth of this assertion, proofs enough are within the knowledge of every one; and we have lately had an instance afforded by the melancholy accident which a few days ago befell the captain of the *Great Eastern* and his boat's crew. The conduct of Dr. Watson, in his brave but unavailing endeavours to save the lives of Captain Harrison and the boy Lay, is such as many other men would have manifested in like circumstances; still, it is most gratifying to record the fact, to the lasting honour of a member of the medical profession. But, when the news of the accident was spread on shore, there was manifested an instance of the promptitude in which the medical man ever holds himself ready to act for the relief of his suffering fellow-creatures. In an incredibly short time, we are told, numbers of the medical men in the vicinity arrived, including Dr. Chapman of the Peninsular and Oriental Company, Dr. Pardey, Dr. Palk, Dr. Wiblin, Mr. Bencraft, Mr. Cooper, and others; and, as each body was brought on shore, they used most strenuous exertions to restore animation. Every medical man must feel that these gentlemen have honoured both themselves and their profession by their action.

At the Llandisilio Petty Sessions, on January 7th, a charge was laid, at the instance of the Salopian Medico-Ethical Society, against a Mr. Eyeley, for practising without legal qualification. Some months ago, Mr. Eyeley had been prosecuted for the same offence; but a nominal penalty only was called for, on his

promising to give up practising. A witness stated that, being taken ill one night, she had called in Mr. Eyeley, who had given her medicine; and that, on the next day, Mr. Cartwright and Mr. Blaikie of Oswestry attended her. It appeared, however, that Mr. Eyeley had entered as a pupil at one of the London hospitals, in order to qualify himself for practice; and that his prescribing in the case referred to was merely a friendly act. He had waited for Mr. Cartwright on the following day, in order to explain his motives. The solicitor of the Medico-Ethical Society expressed himself satisfied with the result of the investigation; and the magistrates, commending the defendant for the course he was pursuing in order to become qualified, dismissed the case. We are glad to find that Mr. Eyeley is honourably carrying out the promise he made to the magistrates some months ago, and is taking the proper means to obtain recognition as a member of the profession.

THE LATE JOHN BLACKALL, M.D.

JOHN BLACKALL, born 24th December, 1771, in the parish of St. Paul, Exeter, was one of the eight children of the Reverend Prebendary Blackall, grandson of Dr. Offspring Blackall, Bishop of the Diocese.

Prebendary Blackall died when the subject of this memoir was only ten years of age. His now widowed mother superintended with singular energy the education of the four sons who survived their father. The care she bestowed on them was self-denying and remarkable, and ever met with a lively expression of grateful and satisfied feeling from her children in their after years.

After gaining the rudiments of a classical education at the Exeter Grammar School, where Dr. Blackall was conspicuous for his aptness and proficiency, he proceeded to Baliol College, Oxford. He thence went to London, where at St. Bartholomew's Hospital, under the preceptorship of Dr. John Latham, he pursued his medical studies. Here he was prominent amongst his fellows, as an intelligent and painstaking student, and the recorded researches of his after years show him to have been at this early time an original observer.

In 1797, having taken his Bachelor's Degree with license to practise, he settled himself as a physician in his native city, and was on the 1st of June elected to fill the office of Physician to the Devon and Exeter Hospital, which the death of Dr. Okes, on the preceding 28th of April, had left vacant.

Dr. Blackall, though assiduously investigating disease, and availing himself of the opportunity, afforded him in the wards of the Hospital, of following out his inquiries into that subject which he made more particularly his own, did not at this time acquire any extensive practice, being still but a young man, (aged 26) with the ground fully occupied by three very eminent physicians, viz.: Dr. Bartholomew Parr, Dr. George Daniell, and Dr. Hugh Downman. After residing in Exeter, for four years, he resigned the office of Physician to the Hospital, and quitted the city to seek his fortunes in the neighbouring town of Totness.

At Totness, the career of Dr. Blackall was eminently successful; he soon enjoyed the reputation of being the physician of that district, and there laid the foundation for a personal and general confidence, which a subsequent change of residence did not destroy.

On the resignation of Dr. Moore, as a Physician to the Devon and Exeter Hospital in 1807, Dr. Blackall was persuaded, though with some difficulty, and only after much hesitation, to again seek practice in the larger sphere afforded by the metropolitan city of the county. On his return to Exeter he was reelected (June 1807) to the office of Physician to the Hospital, and in 1812 he was elected Physician to the Lunatic Asylum of St. Thomas', near Exeter.

In 1813, Dr. Blackall published his well-known work, *Observations on the Nature and Cure of Dropsies.* This work, which ran through four editions, at once placed him in the first rank of the physicians of that day, and acquired for him an European reputation. To the medical world its merits are well known, here it need only be said that in this work the whole history of dropsies, hitherto very imperfectly known in a practical point of view, was classified and arranged in groups having reference to the presence of a single remarkable symptom, previously unobserved, but which was now shown to be of the most vita significance. Though this subject was afterwards in its pathological aspect more fully illustrated by the labours of Dr. Bright, yet let us give all honour to the sagacious and philosophic mind which discovered the importance of hitherto unappreciated facts, and from these worked out conclusions and results not only remarkable in themselves, but in their relation to disease of vast practical utility. The publication of this work, as may be well supposed, tended to develope and cement that success, as a practising physician, which characterised the future career of Dr. Blackall.

On the 3rd December, 1814, Dr. Blackall became a doctor in medicine of the University of Oxford; on the 22nd December, a licentiate of the Royal College of Physicians of London; and was elected a fellow on the 22nd December, 1815.

No one could have been in the society of Dr. Blackall, even for a short time, without being convinced that he was no ordinary man; and this was a feeling that was still more entirely concurred in by those who knew him long and intimately. To a quick perception, there was added a retentive and accurate memory. These qualities, with the very ready use of the most appropriate words, gave him great conversational power; and, as the severer studies of his life had been very largely embellished by a familiarity with our best poets and historians, the story, or the argument, was illumined by apt and comprehensive illustration.

As a physician, he was truly learned; his information on medical matters, singularly extensive and accurate, had been qualified by a wide and varied research from many departments of human knowledge; his diagnostic powers were of the very highest order. Though it may be perhaps said that caution was one of the chief of his medical characteristics, yet this quality by no means prevented him from exercising a remarkable degree of boldness, where experience or analogy justified such interference; above all, as he was clear in his perception of disease, so was he simple in the character of his remedies, patient in waiting for results, far seeing, firm, and self-relying. Personally, he became identified with his patient; feeling an almost sacred responsibility in the health of those entrusted to his care, his solicitude for them was constant, and no labour was thought too great, nor investigation spared, which would tend to add to their comfort and well doing. As a consulting practitioner, it may be asserted that no physician ever more entirely won the esteem of his professional brethren; those who sought his aid in that capacity, ever felt and appreciated the advantages enjoyed from his cooperation, the assistance derived from the resources and instruction thus laid open to them, and the confidence and support afforded by his judgment and firmness.

Though Dr. Blackall never sought public display, but, on the contrary, avoided it, yet, when the interest or credit of the profession was at stake, he was always in his place, as the senior and leading physician of the district; and his judgment and ability ever gave satisfaction on these occasions. This was preeminently the case on the occurrence of the Asiatic cholera in 1832, when he threw himself with an untiring energy into the

duties which then naturally devolved upon him, and which both the profession and the public looked to him to fulfil.

Dr. Blackall retained both his mental and bodily energies through an unusually long period of years; for upwards of half a century, he enjoyed the capability of prosecuting an extensive, arduous, and fatiguing practice, not only within the city, but at great distances around it; and it was not until he had attained the age of eighty years, that he relinquished the duties of private practice, and only a few years previously those attached to his public appointments.

He died on the 10th of January, 1860, at the advanced age of 88 years; was buried in the ground attached to the Trinity Church of this city; and was followed to the grave, honoured and lamented, by relations, friends, and the whole body of the medical profession residing within the city.

Association Intelligence.

BRANCH MEETINGS TO BE HELD.

NAME OF BRANCH.	PLACE OF MEETING.	DATE.
Metrop. Counties. [Special General Meeting.]	32a, George Street, Hanover Square.	Tuesday, Jan. 31st, 8 P.M.

Reports of Societies.

HARVEIAN SOCIETY OF LONDON.

Thursday, Jan. 19th, 1860.

Henry Thompson, Esq., President, in the Chair.

Mr. Thompson thanked the Society for the honour they had done him in electing him to the office of President, and hoped to receive the support of all its members in carrying out the intentions of the founders of the Society.

A Heart exhibiting Extensive Ossification was presented by W. F. Cleveland, Esq. It was taken from a gentleman, aged 83, who had been subject to fits of angina, but had been enabled to walk ten miles five weeks before his death. The powers of life began to give way only a week before his death. The aortic valves were extensively ossified; and there was a large lump of bone in the septum. The left lung was found filled with gritty matter.

THE SUCCESSFUL TREATMENT OF GONORRHŒA AND GLEET WITHOUT COPAIBA. BY WEEDON COOKE, ESQ.

After referring to Sir Astley Cooper's method of treating gonorrhœa, the author stated his belief that he was only giving utterance to a largely acknowledged experience, when he affirmed that copaiba, in the treatment of gonorrhœa, was not only unnecessary, but that it was in a great many instances injurious, and that in all it was offensive to the last degree. During the last fifteen years, at least 6,000 cases of gonorrhœa had come under the author's care at the Royal Free Hospital; and he had availed himself of these large opportunities to test all the methods of treatment which had been suggested, in order to arrive at the safest, quickest, most efficacious, and least disagreeable mode of curing this disease. As introductory to the subject of treatment, Mr. Cooke discussed the subjects of the cause of chordee, the reason for the scalding of the water, the distinction between true and spurious gonorrhœa, and the time when infection may or may not be apprehended. The conclusions he arrived at were:—1. That chordee, in ninety-nine cases out of a hundred, was due to spasm, and not to effusion of lymph; and that cubebs, acting as an antispasmodic, formed the most efficacious remedy for this symptom. 2. That the scalding of the water was the result of the acid urine passing over the highly inflamed mucous surface of the urethra; and that this was to be remedied by the administration of the alkaline carbonates, for the purpose of neutralising the acidity of the urine, thus removing the principal cause of the continuance of the inflammation. 3. That, in all disputed cases, the true gonorrhœa may be known from the spurious by the presence of redness, heat, pain, and swelling, together with a purulent discharge, more or less green and offensive; whilst a discharge produced by connection with a person who has leucorrhœa, or has recently been confined, will not be accompanied with these inflammatory signs, and the discharge will be milky in consistence and colour, differing much from the thick purulent discharge of the veritable gonorrhœa. 4. The time when infection may or may not be apprehended, was discussed in its incubative stage; and at its close a case was given, shewing that the disease may be caught from one person, and not communicated to another two nights after, because the purulent discharge had not commenced at the time of the second intercourse. With respect to infection at the close of the disease, the author had been enabled from experience to establish as a law for his own guidance that gleet, *i.e.* a mucous discharge from the urethra consequent on gonorrhœa, does not set up gonorrhœa in another person; but that, whilst any pus is to be found in the discharge, there is probability of infection.

Passing on to the subject of treatment, Mr. Cooke said that, upon inquiry at the London Custom House, he found that 118,396 lbs. of copaiba were admitted to the port of London only, during the first ten months of the year 1859. If this were administered at the rate of half a drachm three times a day, and supposing each patient takes it for three weeks, there was copaiba enough to treat 473,584, or close upon half a million persons, and that in ten months only of the year. Considering how often it fails to cure the disease, how frequently it is rejected by, or at any rate disorders, the stomach, how tell-tale and disagreeable is its odour from the mouth and skin, how occasionally it produces a papular eruption all over the body; and that, in many instances, swelled testicle and stricture may be traced to its irritating influence, whilst gonorrhœal rheumatism and ophthalmia have been attributed to its administration; Mr. Cooke asked, whether it was not extraordinary that this disgusting medicine continues so long to hold its ground? The abortive treatment by strong injections of nitrate of silver had proved a failure, because in some instances inflammation of the bladder had resulted. The treatment by diluents was slow in its action, and not readily employed by persons engaged in active business. That by diuretics was scarcely more successful; whilst the administration of saline aperients was generally attended with an aggravation of the *ardor urinæ* as well as chordee. The treatment which had been most successful in the author's experience, was the chemical treatment by the alkaline carbonates, given with a view of neutralizing the acid in the urine. Thus one great source of irritation was removed from the inflamed urethra, and the subsidence of the inflammation which nature would effect is allowed to take place. As auxiliaries, especially when there is œdema of the prepuce, lead lotions and elevation of the penis against the abdomen were commended.

The inflammation having subsided, and a mucopurulent discharge being left, Mr. Cooke had found, after giving trial to all the injections which have been at any time in vogue, that the chloride of zinc introduced into this branch of practice by Mr. Lloyd, of St. Bartholomew's, was the most efficacious of any in curing the disease, and that with less discomfort, and in a much shorter time than by any other means. Since employing this treatment he had little, if any, orchitis amongst his patients. The strength of the injection he most commonly employed was two grains to the ounce; but in some instances, one grain to the ounce was sufficient. Whilst advocating this treatment in persons of healthy constitution, it was necessary to altogether change it in others. In the strumous, in the dyspeptic, in those of dissipated habits, and where the diseased person is an old offender, the alkaline carbonates are not called for, because either the urine is not acid, or the inflammation does not run high. In such cases the tincture of iron, or sulphuric acid and bark, or gentian, or calumba, may be advantageously employed from the commencement, and the chloride of zinc injection in these cases is also of the utmost value in rapidly overcoming the disease. Respecting diet, Mr. Cooke considered that, after the subsidence of the inflammatory symptoms, scarcely any restriction need be enforced, and that beer and wine in moderate quantities may be advantageously used by those who are accustomed to these beverages. He had found long established cases of gleet yield readily to the chloride of zinc injection, accompanied with tonic treatment and generous living. In conclusion he would rejoice if the treatment he had found so serviceable should be followed out by others, and thus assist in banishing altogether from surgical practice the use of so nauseous a drug as copaiba.

An interesting discussion ensued, supported by Mr. C. Browning, Dr. Stewart, Mr. Ballard, Dr. Langmore, Mr. Times, the President, and Mr. Acton.

Editor's Letter Box.

DR. BARKER AND MR. CHAVASSE.

LETTER FROM JAMES HEYGATE, M.D., F.R.S.

SIR,—Your editorial remarks on the unfortunate dispute between Dr. Barker and Mr. Chavasse are so good and just, that one would hope they scarcely need any additional promptings to bring about a perfect reconciliation. But may I be allowed, as an old member of our excellent Association, deeply interested in its well-being, and for the sake of the dignity of our common profession, to urge upon all parties the propriety of burying in oblivion all that has passed; for nothing can be more gentlemanly than the letter you have published from Dr. Barker in last week's JOURNAL, making, as far as any gentleman can do, the "*amende honorable*".

I hope also that this letter, and your remarks thereon, will induce the South Midland Branch, with many of the members of which I am well acquainted, to reconsider any resolutions they may have come to, and induce Dr. Barker to withdraw his resignation. I am, etc., JAMES HEYGATE,

Senior Physician to the Derby Infirmary, and one of the Vice-Presidents of the British Medical Association.

Derby, January 23rd, 1860.

DR. BARKER AND MR. CHAVASSE.

LETTER FROM CHAS. COWAN, M.D.

SIR,—Your excellent remarks on Dr. Barker's letter will, I trust, issue in the reestablishment of peace and cordiality between himself and Mr. Chavasse. Let them meet over the grave of their differences, and, by the expulsive power of a generous and forgiving spirit, let the past be consigned to an everlasting oblivion.

Men of energetic minds and irritable over-worked brains have many terrible and fierce encounters to undergo with their vehement and unruly selves; but to elicit our higher human sympathies, and to encourage both the practice and utterance of what is noble and unselfish, should ever be regarded as the most to be coveted points of our associating together.

I am, etc., CHARLES COWAN.

Reading, January 24th, 1860.

DR. BARKER AND MR. CHAVASSE.

LETTER FROM T. WATKIN WILLIAMS, ESQ.

SIR,—As one of those who signed the declaration published in the *Medical Times and Gazette* by Mr. Pye Chavasse, I feel bound, in justice to Dr. Barker as well as to myself, to express my entire satisfaction with the very ample apology which Dr. Barker offers to Mr. Chavasse in his letter in last week's JOURNAL; and I trust the latter gentleman will accept it in a magnanimous spirit. There can be no doubt but that Mr. Chavasse had much cause for complaint; it is equally doubtless that Dr. Barker received great provocation by the conduct of Mr. Chavasse's lawyers, and for which provocation Mr. Chavasse must hold himself responsible.

I cordially join you in expressing a hope that, now Dr. Barker has offered so ample an apology, the affair will be settled to the satisfaction of the profession.

T. WATKIN WILLIAMS.

Birmingham, January 24th, 1860.

ILLEGAL PRACTITIONERS.

SIR,—The class of unqualified practitioners who elude the grasp of the Registration Societies, and pursue their vocation as yet so successfully, are those who actually state themselves "not surgeons". Certificates of all kinds they sign their name to, only erasing the word surgeon if attached, acknowledging to the public that they should be prosecuted if they attended as medical men; making no specific charges, sending in no accounts, but receiving, or pretending to receive, the money as a donation. If one of this class attended a difficult case, and a physician were summoned, consulted, and prescribed, would not this be legal evidence of practising as a surgeon?

I am, etc., CHIR.

January 24th, 1860.

THE OBLIGATIONS OF PROFESSIONAL MEN TO SECRESY.

LETTER FROM T. MARSTERS KENDALL, ESQ., F.R.C.S.

SIR,—In this day's JOURNAL I have just read Dr. J. O'Bryen's letter, and beg to make you acquainted with facts that occurred to myself.

There has been a lengthy trial respecting an old lady's will which I was one of the witnesses to her signing. It was attempted to be shown that she was much under the influence of her servants, one of whom I had attended. When before the examiner, I was asked what was the nature of A. N.'s complaint at the time I attended her? I replied, I thought, as a professional man, I could not answer the question without permission from my patient. It there remained, my objection being taken down. An affidavit was then made by a party that my refusing to answer had interfered with the case. It was argued before Sir R. T. Kindersley, who stated that I was in error to suppose I was privileged to refuse an answer; and that, however unwilling he might feel, as he thought I was a conscientious witness, I must pay the costs of the appeal. I did so (over £32).

As I have paid very dearly for my experience, if you deem the matter of sufficient importance, you may make what use you please of this letter, as a warning to my fellow-associates and the profession at large. Wishing the JOURNAL a prosperous year, believe me, I am, etc.,

T. MARSTERS KENDALL.

King's Lynn, Norfolk, January 14th, 1860.

THE LICENSE OF THE ROYAL COLLEGE OF PHYSICIANS OF EDINBURGH.

SIR,—I shall be obliged if you will inform me what value, if any, is attached to the title of "Licentiate of the Royal College of Physicians, Edinburgh," obtained under the following bye-law:—"Duly qualified practitioners (not being graduates) may be admitted licentiates till April 20th, 1860, on passing an examination in the practice of medicine, and producing testimonials of moral and professional character." The fee for the license is £10.

Will you also inform me whether a person who has become a licentiate in this manner is entitled to rank as, or claim the title of, physician, in England or elsewhere? The examination, I understand, is almost nominal; and the fee speaks for itself. I am, etc.,

A MEMBER OF THE BRITISH MEDICAL ASSOCIATION.

January 1860.

[The value attached to the License of the Royal College of Physicians of Edinburgh, obtained under the circumstances to which our correspondent refers, is simply this: that it gives the holder a legal right to practise *medicine* under a title more in accordance with the objects of the profession than that of "apothecary". A person who has thus become a licentiate of the Edinburgh College is entitled to the title of physician, the term being understood in its simple meaning, and not conveying with it as a logical sequence the idea of connexion with the Royal College of Physicians of London. As to the fee, it is the same as that paid by a Doctor of Medicine of the University of London, and more than that paid by country licentiates of the Society of Apothecaries. With regard to the examination, we will refer our correspondent to p. 803 of the JOURNAL for October 1st, 1859. An account of one of the examinations is there given; and he will thence be able to judge for himself how far it is a sufficient test. EDITOR.]

THE CAUSE OF DR. ALISON'S DEATH.

SIR,—Will any of your contributors learned in cerebral disease interpret the nature and sequence of the disease which destroyed Dr. Alison? He appears to have had ossification of the falx cerebri, a condition often seen without any marked cerebral symptoms; he had also meningitis, and considerable effusion into the ventricles, with degeneration of the arteries at the base. His symptoms were sudden epilepsy, followed by frequent similar attacks, increasing in severity, associated at last with symptoms of acute mania. Will any one kindly associate symptoms and lesions? I am, etc., ENQUIRER.

Norwich, January 1860.

Medical News.

BIRTHS, MARRIAGES, DEATHS, AND APPOINTMENTS.

** In these lists, an asterisk is prefixed to the names of Members of the Association.*

BIRTHS.

Of sons, the wives of—

HOWELL, T. S., Esq., Wandsworth, on Jan. 22.
ORD, Wm. M., M.B., Streatham Hill, on Jan. 18.
THORNTON, W. H., Esq., Surgeon, Margate, on Jan. 19.

Of daughters, the wives of—

BIRKETT, George, M.D., Stoke Newington, on Jan. 22.
HAYNE, L. H. J., Greenwich Hospital, on Jan. 20.
HODSON, T., L.R.C.P.Ed., Clifton Road East, N.W., on Jan. 18.

MARRIAGES.

COLEMAN, Henry W. A., M.D., to Charlotte S., eldest surviving daughter of Colonel MARTIN, 16th Lancers, Preston, at Valparaiso, on November 12th.

LE SAGE, Wm. L., Esq., Surgeon, Wickford, to Mary E., second daughter of the late T. W. BROWNE, Esq., Warminster, on January 19th.

DEATHS.

BUNNY. On January 21st, at Newbury, aged 15, Anna Louisa, third daughter of *Joseph Bunny, M.D.

DE JERSEY, P. F., M.D., in Guernsey, aged 60, on Jan. 10.

FOX, Francis, M.D., at Camberwell, aged 64, on Jan. 22.

HALLEY. On January 23rd, at 7, Harley Street, aged 3, Alice, daughter of Alexander Halley, M.D.

HORE. On January 12th, at Shoreham, aged 47, Ann, wife of William Hore, Esq., Surgeon.

JAMES, Philip T., Esq., Surgeon, at Hereford, aged 70, on January 20th.

ROSE, George C., Esq., late Acting Assistant-Surgeon to the Military Depôt at Fermoy, at Fermoy, aged 30, on Jan. 18.

WILLES, T. G., Esq., Surgeon, at Ixworth, Suffolk, aged 71, on January 15.

WOOD. On January 19th, aged 7 years, Frederick W., eldest child of Frederick Wood, Esq., St. Bartholomew's Hospital.

WOODFORDE. On January 18th, at Bromley, Middlesex, aged 32, Rosa, wife of W. T. G. Woodforde, M.D.

WORDSWORTH. On January 18th, at 23, Queen Anne Street, W., aged 1 year and 8 months, Mary Chasseaud, daughter of John C. Wordsworth, Esq., Surgeon.

APPOINTMENTS.

*HEYGATE, James, M.D., F.R.S., appointed a Magistrate for the county of Derby.

PASS LISTS.

ROYAL COLLEGE OF SURGEONS. MEMBERS admitted at a meeting of the Court of Examiners, on January 20th:—

BALDING, J., Barkway, Herts.
BREAREY, Chas. B., Titchfield, Hants
CANDY, John, Littlehampton
CLAYTON, R. P., Manchester
CLAPHAM, John, Thorney
CREMER, Robert, Norwich
CURTIS, Henry B., Paulton
DUKES, Esquire, Acton Place, Kingsland Road
GRADWELL, Wm., Kirkham
GREENWOOD, T. B., Southwark
KENWORTHY, John, Hollinswood, Manchester
MARSHALL, C. G., Woobridge
MUGGERIDGE, H. H., Reading
RILEY H., St. George's Road
ROBINSON, Mark A., Charing
STEEL, John, Reigate
STICKINGS, G., Lenham, Kent
THOMPSON, A. B., Coleraine
WOOLMER, Joseph B., Pimlico
WARREN, Samuel H., Tutbury
WATTS, W. Newark-on-Trent

The above gentlemen had been previously in practice with the license of the Society of Apothecaries.

HARVEIAN SOCIETY OF LONDON. On Thursday, February 2nd, Dr. Albert Bernays will read a paper on Disinfectants and Deodorizers.

THE "BLACK DOCTOR." M. Vriès has appealed against the sentence lately pronounced on him by the Correctional Tribunal of Paris.

JOHN HUNTER'S MANUSCRIPTS.

THE following correspondence appears in the *Lancet* of January 21st:—

To the Editor of the "Lancet".

SIR,—I should have been reluctant, if I had not had a pledge to fulfil, in asking you to give to the enclosed correspondence a space in your columns which otherwise would be occupied by more useful and edifying matter.

I am, Sir, your obedient servant,
RICHARD OWEN.

Sheen Lodge, Richmond Park, January 12th, 1860.

To the President and Council of the Royal College of Surgeons.

MR. PRESIDENT AND GENTLEMEN,—In the volume containing the Hunterian manuscript "On Geology", of which a copy was transmitted to me on the 23rd instant by direction of the President, the Council, in their Preface, have published the following statement:—

"This Introduction, on which Mr. Hunter had bestowed so much thought and labour, to within a short time of his death, revising and correcting it from time to time, was not prefixed, as he had intended, to the Catalogue of his Collection of Fossils, and is neither mentioned nor alluded to in either of the three volumes of the *Descriptive Catalogue of the Fossil Organic Remains* in the College Museum, published respectively in 1845, 1854, and 1856. It is greatly to be regretted that it was not brought under the notice, either of the Museum Committee, or of the Council of the College. The attention of the Council was, however, unexpectedly drawn to it in 1856, when it was read from the chair by the then Hunterian Professor".

Now, this involves a grave charge against me, as it is generally known that I was that Professor, and at the same time Curator of your Museum, to whom, as is recorded in your minutes, you had confided the preparation of the first two and part of the third, of the volumes of the Catalogue referred to, it will be as generally inferred and believed that I have been guilty of the breach of trust implied in the above allegation.

It ought to be in the memory of members of the Museum Committee, and on the minutes of a meeting, at which the late Mr. Guthrie was present, that I mentioned in, I believe, the month of February, 1855, the propriety of publishing the manuscript in question in the concluding volume of the Catalogue of Fossils, then in course of preparation. Mr. Guthrie, on my replying to his questions, that the manuscript did not contain any descriptions of the specimens, and would require certain annotations, objected to the consideration of its publication at that time, as an element of delay, stating that what was then imperatively wanted was the completion of the Catalogue of the Specimens. Believing that the Museum Committee had not rightly appreciated my explanation of the nature and value of this manuscript, I thought it my duty to make it the subject of the Introductory Lectures to my Hunterian Course on Fossil Remains of the year 1855. Those lectures were delivered in the theatre of the College on the 6th, 8th, and 10th of March, 1855. I enclose a copy of the "Synopsis", published by the College, of those lectures, a duplicate of which will be found, with the other printed collegiate documents, in the archives of the College.

The charge against me, as the Hunterian Professor and the Curator of the Museum, to whom had been confided the preparation of the Catalogue of Fossils, of having failed to bring under the notice of the Museum Committee or Council of the College the existence of the Hunterian manuscript on Fossils until the year 1856, and by implication, when it was too late to append it to the final volume of the Catalogue printed in that year, is chiefly based upon the substitution by the Council, in their Preface, of a wrong date—viz., 1856—for the true date, 1855, when I read the manuscript in question from the Hunterian chair.

The minutes and Council for the year 1855 will show the fact and date of the resolution of the Council to suspend the lectures for the year 1856.

I therefore call upon you, the President and Council of the College of Surgeons, after you have assured yourselves of the accuracy of the date of the public lectures in which your attention was fully and emphatically drawn to the Hunterian manuscript in question, to publicly acknowledge the inaccuracy of the grounds of your published charge, and to exonerate

me from the grave consequences of such alleged breach of confidence and duty as attaches to me in the said allegation in this Preface, prefixed by your sanction and authority to the work entitled *Observations and Reflections on Geology*, by John Hunter, F.R.S. (4to, London, 1859).

I must add that, if, according to the spirit of our English procedures, the nature of the charge reflecting upon your Hunterian Professor, and your officer entrusted with the preparation of the Catalogue in question, had been submitted to me prior to the infliction of the official publication of such charge, I should have been able to furnish the Council with the proofs above cited, which would have shown that I had drawn their attention to the Hunterian manuscript on Fossils more than a year before the last volume of their Catalogue of Fossils was published.

I rely upon the honour of the Council to do me promptly the justice I now demand; for you must be aware that meanwhile I am subject to the invidious insinuations which may be based upon a statement involving a charge preferred by so important a professional and social body—in a public allegation, moreover, contradicted by the actual facts, which might have been known to you on the most cursory inquiry, and which are patent upon the face of a published document emanating from the Council itself. I am, etc.,

(Signed) RICHARD OWEN.

Sheen Lodge, Richmond-park, Dec. 29th, 1859.

I again wrote to the Council, on the 2nd of January, urging a speedy reply.

Lincoln's-inn-fields, W.C., Jan. 9th, 1860.

SIR,—The Council of the Royal College of Surgeons of England have had under their consideration your letters of the 29th December and 2nd January, drawing their attention to a passage in the Preface to the proposed publication of the Hunterian Manuscript on Geology, which you consider to involve injurious reflections upon you, and calling upon them, after assuring themselves of the accuracy of the dates to which you refer, to publicly acknowledge the inaccuracy of the grounds of the charge of breach of confidence and duty on your part which you conceive the Preface to allege against you.

In consequence of your letters, inquiry has been made, and the Council find that the date of your lectures as Hunterian Professor is, as you mention, inaccurately referred to in the Preface, and that the actual date was 1855, not 1856.

The Council therefore consider it to be due to you, as well as to themselves, to express their regret that such a mistake should have occurred, and to withdraw all imputations which the passage in question can be considered to cast upon you. They have also directed that the passage be expunged, and the Preface reprinted without it.

I beg to add that there is no such minute of the Museum Committee as you suppose, and that neither of the living members of the Committee have any recollection of your having suggested to them the propriety of publishing the Manuscript. EDM. BELFOUR, *Secretary*.

Professor Owen, etc., etc., etc.

PROCEEDINGS IN MEDICINE IN CAMBRIDGE. The course of education required of candidates for medical degrees in Cambridge has lately undergone careful revision, with a view to facilitate the access to the degrees without lowering the high standard which they have hitherto maintained; and, secondly, to provide the means of efficient instruction in certain branches of medical science in Cambridge, so that the earlier part of the period which is required to be devoted to medical study may be spent in the University, while the remainder of the period may be passed in the Metropolitan or other large schools recognised by the University. The candidate for the M.B. degree must reside, as heretofore, nine terms, that is, the greater part of three years. This time may be devoted, in part, to general education and, in part, to medical study, or to the former exclusively. Usually, the first half of the time will be chiefly occupied in Classics, Mathematics, and Natural Philosophy; inasmuch as in the fifth term an examination in those subjects must be passed. The latter part of the time may be devoted entirely, or chiefly, to the study of medicine. After passing the previous examination, it is optional either to continue the general studies of the University and take a degree in arts, or to proceed at once to the study of medicine. Courses of lectures are regularly given on comparative and human anatomy, on pathology, chemistry and practical chemistry, materia medica, and botany. There are anatomical and botanical museums and chemical laboratories. Addenbrooke's Hospital affords the means of clinical instruction; clinical lectures on medicine and surgery are delivered weekly in the Hospital; and the visits of the physicians and surgeons are regulated to meet the convenience of the students as much as possible It has been thought desirable that the student should be induced, indeed obliged, to seek part of his medical education elsewhere. He must study medicine in Cambridge during six terms (four if he have taken the degree of B.A.). There are two examinations for the degree of M.B. The first (after the completion of three years of medical study) is in chemistry, botany, elements of comparative anatomy, human anatomy and physiology, materia medica and pharmacy, pathology, portions of Celsus, Hippocrates, and Aretæus. Certificates of attendance on lectures on most of the above subjects, and of practising dissection, are required before admission to this examination. The second examination is in pathology and practice of physic, clinical medicine (conducted at the bedside of the patient), medical jurisprudence, and the medical treatment of surgical and obstetrical diseases. Certificates of attendance on lectures on clinical medicine and surgery, and on hospital practice for three years, are required. An act has to be kept after the second examination. This consists in the reading publicly, in the schools, of an English thesis, followed by a *vivâ voce* examination on questions connected with the thesis, and on other subjects. After the act has been kept, the student has the opportunity of being a candidate for honours in the Natural Sciences Tripos; the subjects for examination are, for the most part, those which he has been pursuing in the course of his medical study. The previous examination in the fifth term, which students must pass to obtain a medical or any other degree in the University, is received by the College of Surgeons in lieu of the preliminary examinations for the membership and fellowship of the College. The attendance on the lectures and hospital practice in Cambridge for one year is recognised by the College of Surgeons and the Society of Apothecaries, as equivalent to one year's study in London or elsewhere. The M.B. of the University is admitted to the examination for the diploma of the College, on merely giving proofs of having completed the anatomical and surgical education required by the College. He can also be admitted to the examination for the license of the Society of Apothecaries on producing his indentures of apprenticeship; but it is not supposed that this will often be done, inasmuch as the degree of M.B. confers a legal qualification to practise medicine. With the view of enabling students who are destined for the medical profession to come to the University at a somewhat earlier period than has been usual, Dr. Humphry has obtained the recognition of his house as a University Hostel, so that pupils residing with him, and pursuing their medical studies under his superintendence, may matriculate in the University, keep terms, pursue their general education to such extent as seems desirable, obtain degrees, and enjoy all the privileges of University students, just as if they were admitted at one of the colleges. Three years residence is necessary to obtain a degree; but the Hostel is also open to students who, having perhaps commenced their professional education elsewhere, may wish to join the University, and attend the medical or other lectures and the practice of the Hospital for a shorter period—a year or two—before going to London.

In Caius College a scholarship worth £20 is annually given for proficiency in chemistry; and another of the same value, tenable for three years, is annually given for proficiency in anatomy and physiology. There are medical fellowships in several of the colleges; and it is to be hoped that some of these will, in future, be given for proficiency in medical science. By this means or by the foundation of a few medical studentships, a great impulse might be given to the pursuit of medicine and the collateral sciences in the University and in the country at large, and much would be done towards establishing that closer relation which ought to exist between the University and the medical profession.

UNIVERSITY COLLEGE HOSPITAL. The Committee, at their meeting on Wednesday week, had the gratification of receiving notice of a legacy to this Hospital by the late Mr. George Nicholl, of Piccadilly. The bequest (the sixth part of the residue of the personal estate of the deceased, payable after the death of his sister) will, it is estimated, amount to upwards of £6000. The Committee have authorised their solicitor to put in a claim to a share of the residuary estate of the late Lord Henry Seymour, bequeathed by him "*Aux hospices de Paris et de Londres.*"

HEALTH OF LONDON—JANUARY 21ST, 1860.

[*From the Registrar-General's Report.*]

		Births.	Deaths.
During week	Boys.. 940 / Girls.. 918	1858	.. 1297
Average of corresponding weeks 1849-58		1645	.. 1326

Among the causes of death were—bronchitis, 192; pneumonia, 123; phthisis, 147; small-pox, 43; scarlatina, 48; measles, 19; diphtheria, 11; hooping-cough, 38. The deaths from pulmonary diseases (exclusive of phthisis) were 357, being 93 above the corrected average.

Barometer:

Highest (Mon.) 30·074; lowest (Sat.) 28·895; mean 29·576 in.

Thermometer:

In sun—highest (Tues.) 69·0 degrees; lowest (Fri.) 47·0 degrees.

In shade—highest (Sun.) 50·5 degrees; lowest (Wed.) 27·0 degrees.

Mean—37·2 degrees; difference from mean of 43 yrs. +3·3 degrees.

Range—during week, 23·5 degrees; mean daily, 10·3 degrees.

Mean humidity of air (*saturation*=100), 91.

Mean direction of wind, S.W.—Rain in inches, 0·62.

TO CORRESPONDENTS.

MISSING NUMBERS OF THE JOURNAL. Several members who have joined the Association since the beginning of 1859, have applied to the publisher of the Journal for missing numbers, in order to complete their volume for the year. The publisher begs to inform them, that the numbers for which they have applied are out of print: but that he will endeavour to procure them.

TO MEMBERS WHO DO NOT BIND THEIR JOURNALS. The publisher of the BRITISH MEDICAL JOURNAL will be glad to receive, from Members who have no further use for them, about a dozen copies of the Journal for the months of *January, February, March,* and *April*, 1859. Sixpence will be given for each perfect number.

A.B. We cannot inform you when the *Medical Register* for 1860 will be published: but we suppose it will appear shortly.

POSTAGE OF MANUSCRIPT AND PRINTED MATTER.

Any amount of manuscript or printed matter, singly or together, provided it contains nothing in the form of a written letter, is transmitted through the post, in packets *open at the ends*, at the following rates: not exceeding 4 ounces, one penny; above 4 and not exceeding 8 ounces, twopence; above 8 ounces and not exceeding 1 pound, fourpence; for every additional half-pound or under, twopence.

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